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MONETARY STABILITY

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MONETARY STABILITY

BY

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PREFACE

THE subject treated in the present pages is closely connected with that of unemployment. It was, in fact, the study of unemployment which first led the present writer into the field of monetary policy; for it is now widely recognised that the relationship between these two questions is so intimate that neither can be examined without some reference to the other. However, although the connection is close, there are many considerations other than unemployment which affect monetary policy. Financial, economic and social interests of a varied nature are involved, all of which demand due consideration before the final policy can be decided. Thus, although the search for a solution of unemployment leads to the study of monetary principle, it thereby opens up a wide field of research involving other complex problems.

The examination of such problems has entailed frequent application to economists and organisations of various kinds in order to secure a clearer understanding of the technical points involved. The advice received, although originally intended for more

official use, has to a large extent assisted the preparation of the present essay, and I had hoped to take this opportunity of expressing my appreciation for the exceptional courtesy and kindness shown by those approached. If, however, my debt appears to go unrecognised, the failure lies rather in the difficulty of interpreting so wide and personal an obligation. Happily, those to whom I owe the greatest debt are independent of any notes which might appear in these few intended lines of thanks.

J. R. B.

INTRODUCTION

The events of recent years have added considerable support to the thesis that disaster is perhaps the most effective spur to progress. In general, serious loss provides incentive to search, not merely for a temporary remedy or device, but rather for a permanent cure. The war itself has been perhaps, of all catastrophes, the most fruitful of such results. For although in many spheres confusion has resulted from relaxed control, constructive thought has also broken from the bondage of convention, and has been able to produce, out of the confusion, new structures built on more logical and lasting bases.

Monetary systems have been no exception to the rule. Several years of swiftly changing standards have caused such widespread dislocation as to compel the adoption of active measures of reform. Already developments have taken place in different quarters, which mark a definite gain on pre-war principle; and there is reason to believe that the process of reconstruction will continue until the ultimate position reveals a universal balance of advantage.

At the present time, however, the situation is so

fluent and uncertain as to give reasonable occasion for doubt as to the immediate future of monetary reform. It is true that real gains can be recorded. Money has now, in point of fact, acquired more stable value than at any time since the outbreak of the war. In the United States, Great Britain, Sweden, Switzerland, the Netherlands and many other countries, the past three years have been marked by a relatively high degree of price stability. Numerous other countries, such as Germany, Hungary and Austria, have succeeded in stabilising their exchange and so tying their fortunes to the dollar or to sterling. But in spite of this appearance of gradually increasing solidity and strength, a certain lack of confidence still prevails. Nowhere is there adequate assurance that the relative price stability attained will be preserved. And whereas the stability itself is important, confidence in its continuance into the future may be almost equally so.

Two conditions would seem essential before full confidence in the price policy of the future can be restored. The first is that of securing universal agreement on the monetary standard which would yield the best results. This problem is, however, approaching daily nearer its solution and will therefore receive comparatively little attention in these pages. It seems probable that the various forces working for the return of gold will bring that metal into use in the large majority of countries just as

soon as industry is able to support the strain and undertake the risks. And whereas one may hold the view that the non-metallic standard constitutes the Utopian way, there can be no question that the gold regime is capable of being moulded in such a manner as to satisfy completely the requirements of a price stabilisation policy. In these circumstances, the nature of the system itself may be of less importance than the achievement of general unanimity thereon. However this may be, the argument throughout these notes assumes—a little regretfully, perhaps—that there will be a widespread abandonment of the greater freedom of the paper standard and a general concentration on a theoretically perfect, but perhaps less plastic regime, the Genoa system for a gold exchange standard.[1]

The second principal condition for the return of general confidence, and the one with which this essay is more particularly concerned, is that clear definition should be given to the policy of stabilisation to be adopted. In illustration of this requirement, it may be shown that when, for instance, the value of a currency is stabilised in terms of gold, that currency is made equivalent to a *defined* weight of gold. Similarly, when one currency is stabilised in relation to another, precise limits are *defined*

[1] These pages were written before the resumption of the gold standard by Great Britain, a circumstance which makes the above forecast still more certain.

within which fluctuations of the exchange rate are to be restrained. Without such clarity of definition the policy of stabilisation would in either case be meaningless. The same is true of any policy of price stabilisation; if stability of currency in terms of what it buys, commodities, is to be secured, one essential element for the new development is to define in unambiguous terms the precise nature and degree of the stability to be attained.

The importance of giving clear definition to the objective in view will be more readily perceived when, in the chapters which follow, an account is given of the somewhat complex machinery necessary for securing price stability. Under the gold regime, no country will be entirely independent in its monetary policy; and in order to safeguard the principle of price stability, international agreement and co-operation will be necessary. It is evident, however, that international agreement is impossible unless the policy to be mutually approved is capable of definition. Neither is it sufficient merely to express the policy in terms of general principles; for, when the aim in view can only be attained through a number of countries working separately in their different spheres, they must one and all interpret that aim alike. And for uniformity of interpretation, clarity of definition is the first essential.

Furthermore, various important forces are working against the principle of price stability. There is

first the natural swing of industry itself. Unless the fluctuation of trade can be restrained, it will destroy the effort to maintain a steady level of prices. Again, with the restoration of gold as an essential element in the monetary system, there will be a tendency for that metal to claim complete command once more. The gold situation may gradually force its way into recognition as the dominant criterion for credit regulation, to the detriment of price stability. So long as such conflicting influences remain, there can be no security for the principle of price stability unless it is intelligibly defined. The executive responsible for monetary policy are lost unless they have in mind some precise conception of what they are trying to preserve.

Such broad ideas will take more concrete form when the mechanism for securing monetary stability is more closely examined. At the outset, it seems clear, however, that, both for the purpose of devising the national and international measures necessary for bringing price stability into force, and for the safeguarding of that principle once in operation, the clearest possible definition must be given to the aim in view.

The aim to be attained does not, however, lend itself easily to definition. Two alternative methods of describing price stability will be suggested here. The first, the more precise, requires the recognition of a given level of prices as " normal," and the main-

tenance of the price level always within reasonable range of that position. The second, permitting less precision, but more discretionary power, assumes that price fluctuations should be judged according to their effects; only when the movement becomes so rapid as to introduce unhealthy tendencies, should the movement be restrained. Under this second system, the price index is supplemented by subsidiary indices of speculation, employment and production, indicating the actual effects of the change of prices.

In order that these methods of defining the objective of monetary stabilisation may be clearly pictured, they are shown more fully as the working basis of two complete alternative systems of price stabilisation. The two systems, which are thus built up, are quite distinct; and they demand that a definite choice should be made between them. Accordingly, they are set up side by side and examined in relation to six important tests, to determine which will give the greatest satisfaction from all social points of view.

The defining and the testing of these two alternative systems of price stabilisation forms the principal theme of the present essay. Perhaps the task involved is of a somewhat exacting nature; for it entails the development of an imaginative picture, showing each stabilisation system in actual operation; and then a comparison has to be made of the probable results which each would give. All that is claimed, however, is that the task is an essential one, and must

inevitably be taken up by those who wish to see the principle of monetary stability applied. Without definition, this principle can inspire no confidence; neither can it be consciously attained by those who guide our monetary policy.

It is not suggested here that the urgency of giving definition to the desired objective has been entirely disregarded. Numerous economists have defined precisely the degree of price stability they think is needed, but unanimity is far from being reached. The arguments adduced are scattered wide in different works. Each author tends to emphasise one particular aspect, and a certain width of perspective is inevitably lost. Thus, the strong conviction still remains that, despite the mass of well-directed thought and unanimity on broad conclusions, society is not yet ripe for price stability, merely because it has not yet determined what precise nature or degree of price stability is universally desired.

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MONETARY STABILITY

PART I

DESCRIPTIVE

CHAPTER I

THE NEW PROBLEM

MONETARY stability, or stability of the purchasing power of money, can be secured only through the stabilisation of trade itself. For the purchasing power of money is determined by the prices of the commodities which money buys; and prices, in turn, depend upon the state of trade. When the demand for any one commodity increases, the price of that commodity tends to rise. Similarly, when trade, in general, is active, and the demand for a large number of commodities develops, then the general level of prices is drawn upwards; and with the general rise of prices, the purchasing power of money falls.

Monetary stability and trade stability are thus almost synonymous. In any event, the only means for giving a stable value to money is to stabilise the current of trade. Otherwise expressed, the essential

problem in securing monetary stability is that of ruling out fluctuations of trade. The "trade cycle," so long as it remains uncontrolled, will produce fluctuations in prices and the resultant variations in the value of money.

The problem of controlling trade fluctuations may be expressed as that of securing a uniform rate of expansion in industry as a whole. Unless regulated, the development of trade tends to follow an uneven course, periods of unrestrained extension giving place to retrenchment and recoil. The forward sweep of trade is a united, almost an organic movement, involving every industry, and containing within itself a powerful momentum. It is the steadying of this momentum which constitutes the essential task of stabilisation; the aim should be, metaphorically, to set a bridle on the advance of industry, and by judicious restraints, alternating with relaxation of the rein, maintain that rate of progress which involves neither excess nor undue sluggishness. If such steadiness can be imparted to the development of trade, a certain measure of price stability should ensue. In fact, the limits within which the price level can be confined will depend essentially upon the extent to which the course of trade can itself be smoothed. If industry cannot be restrained from wildly fluctuating, then prices will also swing to and fro with equal unrestraint.

A further feature, common to the policies of stabilis-

ing industry and stabilising prices, is that both are concerned with general, and not with individual movements. In the stabilisation of prices, the relative movements of the separate prices are disregarded, and only the general trend is taken into account. Likewise, the stabilisation of trade infers the regulation of the "average" movement, each individual unit being untrammelled by direct restraints. The measures to be applied are such as bear lightly and as widely as possible over the different sections of the industrial community.

Such preliminary notes are intended as introductory to the main point of current interest: the problem of stabilising industry to-day presents itself in a form considerably different from that of pre-war days. An important change has occurred in the nature of trade fluctuations, which has altered and materially enlarged the task of stabilisation. Before the war, the trade cycle was regarded, in its broad features, as a mechanical, almost stereotyped phenomenon. It conformed to certain rules or standard beliefs as to the order and the manner in which its different phases followed one another. In point of fact, the course of trade did follow fairly regular wave-like phases of development and change. From time to time, after some years of undisturbed, monotonous, but healthy industry, there gradually developed a stage of general prosperity, leading finally to intense activity, or "boom." The unrestrained expansion

and excessive speculation fostered during such a time, produced internal stresses which, gradually undermining the inherent momentum of the boom, resulted finally in collapse. Then followed crisis, in industry and finance alike, and general liquidation. The subsequent process of marketing surplus stocks, of closing down unsound adventures, and pruning out uneconomic units occasioned widespread loss and suffering. Depression continued until readjustments had been made and surplus stocks worked off. Finally, the gradual dawn of confidence, after the months of gloom, would mark the inception of a period of recovery. Revival, once afoot, was usually cumulative, and industry, in course of time, would once again be throbbing with activity. The trade-cycle, truly so-called, might then begin again.

Before the war, owing to the regularity of the recurrence of the trade cycle, this phenomenon was regarded as almost inevitable. It was examined by economists in a fatalistic frame of mind, as a by-product of the industrial system from which there was no escape. It was considered to have a natural periodicity, about seven to ten years, which it would be impossible to break. The sequence of its different phases—boom, crisis, depression and recovery—was felt to be unalterable, and each phase was supposed to arise out of its predecessor.

This generally fatalistic way of regarding the pre-war trade cycle was not without a basis of sound

reason. Industry works at all times in a money economy. Before the war, the monetary system was almost mechanical; and it inevitably imparted a certain mechanical character to industrial fluctuations. Only a moment's consideration is necessary to show the important position which money holds in economic life. Every transaction which is ever effected in business is carried through by means of some form of money or credit instrument. Without money, no man can buy. And a fractional change in the amount of money or credit in actual use will make an important difference to the total purchasing of the community. Consequently, the banking system, which is the source of the money supply, must exert a powerful influence on the general trend of trade activity. Large sections of industry are, in fact, directly dependent on loans from the banks for financing enterprise, and the rest are indirectly dependent on the system as the source from which the essential instruments of purchase are distributed. In consequence, when the banking system follows a restrictive policy, discourages borrowing, and compels the repayment of loans, the whole of industry must feel the reaction in the diminution of trade demand. Conversely, a more liberal policy facilitates the expansion of demand.

Before the war, the loan policy of the banks was determined by one predominant factor: the state of the reserves of gold. Whatever policy the reserve

situation dictated was put into effect. Thus, when gold abounded, credit was universally eased, confidence tended to revive, trade to expand and prices to rise. The development, once in motion, continued, diffused, and gradually matured into a boom. The boom might then continue, pressed forward by its own inherent forces, until it caused such a development in the demand for credit that the banks began to fear for the adequacy of their reserves. Thereupon the expansion of credit was restrained; the boom was checked; crisis and reaction followed, bringing in their train depression. Prices fell, and credit deflation continued until ultimately the situation was restored, with adequate or redundant gold reposing in the vaults of banks. The downward movement might then terminate, and the upward swing begin again.

The monetary factor was, of course, not the only one for consideration, even in the mechanical pre-war system. Within the major swing of trade and prices, forming a complete cycle of some seven to ten years, there were frequently minor cycles, caused and restrained by factors independent of the monetary system. And even in the major cycles, circumstances unrelated to monetary conditions intervened and influenced the general trend of trade. What may be said with some certainty, however, is that, regardless of other circumstances, the upward swing of trade, the boom, was definitely limited by the available

gold supply. Moreover, the intensity of depression was also limited, though less rigidly, by the same condition; for as soon as the reserve situation was sound and showed that the critical period was passed, confidence revived and facilitated trade expansion. Industry thus fluctuated between elastic limits, the limits being determined very largely by the monetary supply.

Almost every pre-war theory of the trade cycle, whether monetary or otherwise, tended to show the movement of trade as a mechanical, "inevitable" pendulum swing. In consequence of this, even the most optimistic of reformers felt that little more was possible by way of remedy than to temper down the most destructive phases of the inevitable cycle. It was thought that, here and there, it might be possible to intervene. In times of very serious distress, perhaps, an attempt might be made to fill up the slump in business demand by introducing public works. Or, occasionally, it might be possible to disregard the gold reserve situation and temporarily adapt credit policy to the requirements of industry. But no continuous, concerted policy was ever contemplated. Although the impotence of man was perhaps unduly stressed, there seems no question that the mechanical system of monetary control in operation then precluded the most effective remedy from use. For instance, it seems questionable whether any action whatever could have been taken to avoid

the three serious depressions which took place between 1873 and 1896, when the production of gold failed to keep pace with industrial expansion. The 40 per cent. fall of the price level during that period could not have been prevented without the modification of the monetary system; and whenever prices fall, loss is incurred and depression inevitably ensues.

Since the war, however, a new conception has developed. The trade cycle itself has broken away from all the characteristics which qualified it as "inevitable." And the new trade fluctuations are no longer regarded as an unalterable dispensation of unseen powers; on the contrary, they are recognised to be subject to influence by forces within human control.

The changing character of the trade cycle is perhaps most evidenced in the complete break-up of cyclical periodicity. Since the Armistice, France, for instance, has had three complete cycles, marked by crises of some magnitude in 1919 and 1921, and a minor slump in 1924. Furthermore, the so-called "world crisis" affected different countries at entirely different dates. Japan, India and Egypt felt some reaction early in 1920. America's depression developed in the summer of that year. Scandinavia and Western Europe were not affected until the following winter. Depression reached Czechoslovakia only at the end of 1921, Austria in 1922, Germany and Greece in 1923 and Poland in 1924.

A further change which has occurred and has

deprived trade fluctuations of their "inevitable" character, relates to the sequence of the different phases of the cycle. The previous order of boom, crisis, depression and recovery has by no means been maintained in post-war times. Thus, the case of the Netherlands might be cited, where no boom occurred in 1919 and no severe crisis was felt in 1920; yet depression began in 1921, developing greater intensity throughout 1922 and 1923, until finally the winter of 1923–1924 might justly be considered more critical than any other period. Again, the United States experienced rapid recovery from the slump of 1921, continuing until the spring of 1923; then followed a period of healthy, stable trade for the rest of the year; then, for no apparent reason, a gradual decline in 1924—preceded by neither boom nor crisis—which culminated in serious depression.

Thus, with evidence accumulating on every hand to show that industrial fluctuations may have definitely changed their character, the successive phases of trade activity cannot truly be regarded as "inevitable." On the contrary, the coincidences perpetually arising would seem to point to the reverse opinion, namely, that fluctuations of trade are at all times subject to influence and sometimes to control. In actual fact, every important change which has occurred in trade during the post-war period has been accompanied by some corresponding change in the financial or monetary policy in the State concerned. Thus,

inflation has given rise to a boom in trade; the policy of deflation has, at all times, brought about intense depression; and a stable price regime has in most countries been accompanied by the smooth development of trade.

Arising out of innumerable coincidences of this nature, the theory has thus arisen that the State and banks combined might at all times so mould their financial and credit policies as to influence the trend of trade and assist stability. Whereas their influence has previously contributed, perhaps unavoidably, to augment instability, it might in the future be used as a powerful stabilising force. For instance, it is felt that immediately industry is breaking away from a period of healthy activity into one of excessive expansion, the issue of credit might be restrained by banks; and the State might reinforce this moderating influence by postponing public works. Then, when depression seems imminent, the policy might be reversed, loan conditions being greatly eased by banks and public enterprise being speeded up by municipal and State authorities.

In one country, such a policy has already passed the stage of theory and is being tested in practical application. The Federal reserve system of the United States regulates the credit policy of that country almost exclusively in accordance with criteria showing the real needs of industry. An attempt is being made to adjust the general credit supply

of the country so as to avoid restraining legitimate trade expansion, whilst, at the same time, eliminating undue speculation. The purpose is, in broad terms, to secure smooth development at every stage by counteracting any tendency to maladjustment or loss of equilibrium in the process of production.[1]

For some three years, the new technique of credit control has been in evolution, and its continuance for some time into the future may be expected. There is, however, one essential condition on which this development has been dependent, a condition which will be equally necessary in the future unless the whole conception of scientific control of credit is to be abandoned. During the last few years the United States have possessed a supply of gold considerably in excess of the legal requirements of the banking system. Consequently, the mechanical interference of the gold reserve situation has been avoided. Throughout the period of post-war development, the gold situation has, in fact, been excluded from the criteria governing credit policy.

So long as a surplus of gold can be maintained in the United States, the necessary freedom for the development of a scientific technique of credit control will be preserved. In other countries, a similar freedom will be created wherever the gold situation is ruled out as a determinant of credit policy. This

[1] For a complete account of the new system in use, see the Tenth Annual Report of the Federal Reserve Board.

could be done, to some extent, under the gold standard by the abandonment of fixed reserve requirements, or it could be effected by the continued operation of an independent non-metallic standard. It will, presumably, be the task of some future international conference to ensure the preservation of the surplus of gold in the United States by restricting the international demand for that metal; [1] and it is to be expected that certain other countries will adopt such monetary systems as will allow them a measure of independence in their internal credit policy. In such circumstances, the policy of credit control, which has sprung up during the last three years in the United States, can be continued in that country and can be extended, within limits, to other States.

It may be, perhaps, that this represents a somewhat too optimistic view of the future. The monetary world appears, in fact, to be hovering between two alternative proposals. The one proposal is that the surplus of gold now existing should be distributed amongst the various nations again according to pre-war proportions, so that reserve ratios might again come into play. The distribution would be effected in such a way that the gold reserve situation would stand roughly where it was before the war. Credit policy would then be determined once again by the volume and movement of gold reserves. The object of this procedure would be, in fact, to re-establish

[1] For an account of the measures involved, see Appendix I.

the gold standard in identically the same form as existed before the war.

If this counsel were to prevail, then industry would once again be at the mercy of the gold market. Any shortage of gold, no matter how created, would compel the contraction of credit, and precipitate depression. The trade cycle, working within the traditional monetary structure, would again assume its "inevitable" character. Fatalism would prevail once more; and the conception of a continuous system of credit regulation based on the observation of industrial conditions would fade into oblivion.

The alternative proposal, the one briefly touched upon above, is to preserve, and if possible extend, the conditions which during the past three years have given freedom to the control of credit. By various devices (to be discussed more fully later), the gold situation is to remain banished from the criteria determining credit policy, so that a system such as that built up recently in America may be continued without interference from such rigid and mechanical conditions. For the purpose of the present essay it will be assumed that this policy will be the one followed, and that efficient measures will be introduced for preserving freedom for the control of credit.

If these conditions may justly be assumed, there will then subsist what we have termed "the new problem," namely, that of devising, not a disjointed,

opportunist policy of credit regulation, such as might have been applied before the war, but a consistent, continuous credit policy for influencing industry at every stage and facilitating its stability. The essential feature distinguishing the new policy from pre-war methods is the *permanent* character of the regulative influence to be exerted in the future.

Let us then press forward to the examination of the new problem in greater detail. In view of the preponderating influence of the banking system, its credit regulation will be regarded as the central feature of the new policy. The co-operation of the State in the policy will be introduced in its relevant place.

In approaching the problem raised by a permanent policy of credit regulation, two principal questions stand out. First, what are the chief objects to be attained by such a policy? Secondly, what precise indices are available for showing whether those objects are being achieved?

1. *The Aim of a Continuous Credit Policy.*

As regards the first of the fore-named problems, the nature of the objects to be attained, it has been assumed, up to the present, that the chief purpose of credit policy should be to maintain industry at its highest permanent level of activity; that the endeavour should be made to steady the forward swing of trade so that excessive extension may be avoided and industry stabilised at the high level reached.

This does not seem a sufficiently wide view, however; for various other considerations arise which should not be neglected. Credit policy, by affecting the level of prices, affects also the cost of living; and changes in the cost of living entail the readjustment of wages, with all its distressful accompaniment of industrial friction and unrest. Again, credit policy, by influencing the level of prices, affects also the distribution of wealth and income, first favouring one section of the industrial community, then another. Credit policy thus raises issues of great concern entirely apart from its relation to industrial productivity.

These further considerations, the advancement of industrial harmony and the promotion of social justice, will therefore not be lost to view. But in the interest of clarity it is intended here to consider, for the moment, only the problem of securing a high degree of efficiency in industry. Thus, for the purpose of the initial discussion of the new permanent policy for the continuous guidance of industry, we shall regard as one essential object of such policy the maintenance of industry at a high level of activity. More concretely, this aim might be described as that of securing maximum long-period productivity in industry.

2. *The Selection of the Indices for the Guidance of a Continuous Credit Policy.*

The second point of importance in broaching the

new problem is, having set before us the task of securing maximum productivity, to determine what precise indices are available to show at every stage whether this purpose is being attained. At first sight it seems that, since production is the aim, an index of production itself would prove most valuable as a guide. For instance, one might decide upon a maximum "normal" level of production, that is, the level which might be considered to represent the highest attainable long-period average of production. Then if production fell below that normal, credit would be eased; if the level of production rose above normal, credit would be restrained.

It is patent, however, that such a criterion can never be used independently of other indices. In the first place, there are few countries in which a satisfactory index of production exists; and, secondly, even though the actual measurement of production were to raise no serious problem, the determination of the most suitable "normal" would meet insuperable difficulties. Any sudden change in motive power, hours of work, mechanical inventions, etc., would so modify the productive capacity of a nation as to convert the computation of the normal into pure conjecture.

An index of employment has sometimes been suggested; for employment is capable of fairly accurate measurement and its maximum is more precisely known than that of production. It has

been proposed therefore that when the limit of employment is being reached, that is, when a certain "normal" level has been exceeded and production is consequently approaching a maximum, credit should be restricted. When this policy begins to cause unemployment and the index of employment falls below the normal, the policy should be reversed and easy credit conditions introduced. In this case again, however, the selection of the "normal" level of employment would be quite arbitrary. If the level chosen were too high, the result would be continuous inflation; if too low, deflation would be the consequence, and the aim of securing maximum productivity would at the same time be missed. If by a happy chance stability of prices were gained through the selection of the right normal, so much the better; but would it not seem more rational to avoid all risk of inflation and deflation by using the price level as the principal criterion at the outset?

In any event, the employment index, like the production index, could never be considered as more than a subsidiary guide to credit policy. It seems, therefore, that, even though maximum productivity be the object of credit policy, the index of production and allied indices are insufficient in themselves to show whether the desired aim is being obtained. It remains to be seen, therefore, whether by combining them with an index of prices, or by the use of the price index alone, a satisfactory criterion could be

found to indicate that maximum long-period productivity is being achieved.

It may perhaps be difficult at the outset to appreciate that any connection whatever can exist between price movements and productivity. The relationship can, however, be worked out almost mathematically by the following chain of reasoning.

The index number of wholesale prices is a figure which is reached by averaging the prices of a representative group of commodities (usually some forty articles or more) entering largely into commerce. This being the case, it is to be seen that, just as the change of price of any individual commodity in the group denotes a corresponding change in demand and supply affecting that article, so the composite index number, by reflecting the price changes of the entire representative group, shows as clearly as is possible the relative state of demand and supply for commodities in general. The fullest statistical evidence supports the theoretical argument that this index of the general level of prices is the most sensitive index available for showing changes in the general state of demand and supply. Thus, when the price index rises, this is usually an indication that the general demand of the community is tending to exceed supply; when there is a fall of prices, this is the outward sign that demand is falling off and is proving inadequate to absorb the new product of industry. So long as the price level remains stable, this is the clearest evidence that

demand is neither outstripping nor falling behind supply, but that demand and supply are running evenly on parallel lines.

Such a condition of equilibrium is the ideal of all monetary policy. If it were possible to adjust demand exactly to supply at all times, there could never be depression. The trade cycle would be ruled out of existence. When the price index remains steady it is the surest possible evidence that the ideal adjustment is being achieved. Regarded in this light, the stability of prices is less an object in itself than an indication that the desired equilibrium between demand and supply is being preserved. It is an indication that demand is never unhealthily active, nor is there ever a check in the absorption of whatever industry produces.

How then is this index of prices related to the problem of maximising production? In this way: the essential condition for securing maximum continuous production is that there should always be just sufficient demand—neither too much nor too little—to absorb whatever new supplies are brought forward for sale. Production depends essentially on demand: on the ability to market the product; and *maximum* long period production depends on the *continuance* of good markets. For it is to be seen that a feverishly active market cannot call forth more production than a healthily active market, since the productivity itself of industry is ultimately limited.

But, on the other hand, a feverish market leads to general speculation and breeds an ultimate relapse. Hence the average production called forth by alternately feverish and stagnant markets must be less than that induced by a stable, continuously healthy market.

If it is possible therefore, by carefully watching the index of prices, to ensure that demand is always running exactly parallel with supply, this provides the clearest possible assurance that market conditions are prevailing which will call into existence the maximum long period productivity of industry.

This, then, is the essence of the argument in favour of price stabilisation from the point of view of maximising production. There arises, however, an objection of a practical order. Suppose that the policy of stabilisation were inaugurated when industry was in serious depression. Would not this mean stabilising both demand and supply at a very low ebb? Again, even though industry were at a high pitch, would it not be possible for both demand and supply to decline together whilst the price level still remained stable? These appear to be quite legitimate questions and can seemingly be answered only by an examination of the incentives to expansion inherent in industry itself.

The evidence of the past three years has shown that industry can in point of fact recover from the deepest depression without the stimulus of rising

prices [1] (though a slight rise of the price level may materially aid the revival). What is of importance to note, therefore, is that the incentives inherent in industry itself are strong enough, even when prospects are poor and costs abnormally high, to produce expansion. If industry can thus expand under such unfavourable conditions without the stimulus of rising prices, the incentive to expand in more prosperous times must certainly be adequate to maintain industry at its highest healthy pitch without the aid of a rise in prices. A policy of price stabilisation need therefore cause no apprehension as to the possibility of its unduly restraining industrial development or leading to decline.

Industry itself, when analysed, is merely a composite of a vast number of business units, each of which is vigorously impelled by human aspirations —the desire for profit, the desire for prominence, the desire for power, the desire to render service— by every stimulus, in fact, which causes units, large and small, to snap up opportunities for new expansion. The incentive to expand is ever present. All that monetary policy aims at is to hold that incentive

[1] The recovery in Sweden, Canada and Switzerland was effected on an almost stable price level. In Great Britain prices have remained relatively stable for three years, but recovery has been very slow throughout and, at the time of writing, appears to be definitely checked. This may be due to numerous causes, such as international dislocation, or the *threat* of a further fall of prices, or the inability of war-extended industries to transfer their surplus labour back to other trades. It does not, however, discountenance the theory outlined here that the assurance of a stable level of prices is itself a condition that will permit, and will favour and foster, all legitimate trade expansion.

judiciously in check and never permit its breaking loose and plunging industry into the whirlpool of a boom. The stabilisation of prices does not and cannot destroy the incentive to develop; it merely eliminates the false stimulus produced by rising prices.

Moreover, when prices tend to fall—the outward evidence that demand is weakening—the stabilisation policy entails that every effort will be made to increase the purchasing power and the buying activity of the community. If the policy succeeds, it thus ensures that markets are provided for every increase of goods which sound expansion and new economies can yield.

Thus, under the stable price regime, there are two sets of forces at work tending to maintain industry at its highest permanent level of activity: on the one hand, the incentives inherent in competitive industry itself and, on the other, the continuous conscious attempt through monetary control to prevent demand from waning, markets from weakening, and prices from declining.

Perhaps this method of statement may seem unduly theoretical; but the practical observer will find its conclusions amply supported by historical fact. No serious depression has been known in any country at any time without a corresponding fall of prices. And no boom has ever been experienced without a rapid upward swing. There is thus reason for concluding, from evidence both of fact and theory, that the stable price regime will lead to the maximum

long-period productivity of industry. And in so far as this may be the aim of credit policy, the price index might justly be taken as the essential guide for those responsible for control.

This is a conclusion of no small weight. Price stability may be regarded as in itself an aim. But essentially, its purpose is to provide an index for the guidance of monetary control in order that maximum productivity may be secured. If this may be accepted as a basic principle, the further problems then arise :

What *degree* of price stability is desirable ? And should the price index be used independently, or should it be combined with other indices such as those of production and employment ? Until these questions receive an answer, more or less unanimous, the principle itself is of little value. Although, by continuous kindly interventions of Fortune, a high degree of price stability might be secured and yield correspondingly good results from the point of view of production, yet without precise definition, the policy of price stabilisation could not inspire the necessary confidence to make it yield the best results. Moreover, there always remains the possibility that no stability will be secured at all, if those desirous of seeing it in force are unable to describe exactly what they want.

This brings us, then, to the principal theme of the present essay : the *quality* or *degree* of price stability required ; and the method of defining such stability.

The best method of approach would seem to be to reverse the order of these problems. As a means of describing how the price index may be used as a guide to credit policy, let us first build up in our minds two complete alternative systems of stabilisation embodying the use of the price index, each in a different way, as a central feature. It will be seen later that there are two possible systems, and only two, in which the use of the price index can figure as a principal characteristic. After describing these two systems and picturing them clearly in our imagination, we may carry them forward, side by side, and examine them in the light of different tests, to see which would seem to give the greater satisfaction from all social points of view. Having thus visualised these price stabilisation systems in operation and compared their probable effects, and having determined which will yield the best results, we shall then be able to say that the approved system is the one which contains the ideal conception of price stability. That system will reveal the precise nature and degree of price stability which should represent the aim of monetary policy.

This first task of describing the alternative systems is not simple. It will be somewhat exacting of the imaginative powers, and the reader's indulgence is therefore solicited.

3. *The Alternative Systems of Price Stabilisation.*

The first possible system of price stabilisation is as follows:

A definite level of prices would be selected as "normal." The attempt would then be made to hold the price level at all times as near as practicable to that normal, say, within 3 per cent. of it.[1] Whenever prices fell below normal and approached the lower limit, credit would be eased and all possible measures adopted by State and banks to encourage purchasing activity, so that the level may fall no further. The reverse process would be applied when an upward trend was in evidence; undue divergence from the given normal would entail the application of a restrictive credit policy. This method we shall term below the "constant price-normal" system, since it contains as its essential feature the idea of a fixed and recognised "normal" level of prices.

The second method of using the price index is rather more complex:

There would be included no conception of a fixed "normal" level of prices. The price level would remain, so to speak, unanchored. And, consequently, the long-period or secular movement of the price level would be left entirely to hazard. But the

[1] In practice the width of fluctuation would not be rigidly defined, but would at all times be at the discretion of the central banks. Moreover, they would use criteria, other than that of the movement of prices, for determining *at what stage* to check the divergence of the price level from normal and turn it back towards normal.

actual current movement would, at all times, be regarded. Whenever the current price movement gave evidence of introducing unhealthy tendencies, either by leading to speculation or by bringing on depression, the movement would be restrained.

It is evident that, under such a system, the price index could not be used independently.[1] For the

[1] It has been suggested that even under this system, without the use of a "normal," the price index might be used independently, provided it might be possible to define the degree of *rapidity* of price movement which might be permissible. The principal harm caused by price movements is after they have attained a certain degree of rapidity; and the purpose of this more elastic system would be to prevent such development into rapid fluctuation.

This proposal, however, raises the extremely difficult problem of defining "permissible rapidity." A movement, say, of 4 per cent. per annum would not seem excessive, though that would be quite an arbitrary figure. However, if 4 per cent. per annum is chosen, it is to be seen that a movement of ½ per cent. in one month is more rapid than the limit chosen, and that the strict application of the criterion would entail an attempt to check such a movement. In order to avoid this difficulty, it might be suggested that the twelve-monthly period prior to the moment of deciding policy might be taken as a basis for estimating the rapidity of movement. A further difficulty would then arise that if the price level had risen, say, 4 per cent. in the first eight months and had then fallen 8 per cent. in the subsequent four months, the total displacement of the price level for the twelve-month period under consideration would still be only 4 per cent. per annum. There thus arises the somewhat difficult problem of measuring rapidity of movement in such a way as to take due account both of the recent movement and of the long-period change. In point of fact, it would be statistically possible, by a method of weighting the different months, to work out a system of measuring rapidity of movement so as to take greater account of the most recent change whilst not neglecting the previous long-period movement. But from a practical point of view, the task of devising and securing agreement on such a method, and then fixing the limit of a permissible rapidity as measured in the approved way, would hardly seem feasible.

In addition to the technical difficulties raised by such a proposal, the argument might justly be advanced that, in any system for avoiding rapidity of price movement, it is the effects of the rapid movement, rather than the actual rate itself, which is the chief consideration. For a given rate of movement may, at one stage, prove of little account; at another, it might be disastrous, the effect depending essentially upon the reserve strength

movement of prices is to be judged essentially by its *effects*. And the effects of the price movement could only be shown by subsidiary indices such as those of speculation, production, and employment. Thus, this second system, which we shall term the "composite" system, is less precise. Its method of use is roughly as follows.

Immediately a decline of prices threatened or forecast depression—and particularly if subsidiary indices of employment and production gave a similar indication—credit would be eased and every effort made to stimulate demand. Immediately a rise of prices began to show unhealthy tendencies, either by accelerating, or by giving rise to undue speculation, then the expansion of credit would be restrained.

This method of combining different indices in support of the price index may, therefore, reasonably be designated the "composite" system. The difference between this method and the "constant price-normal" is in this essential point, that it entirely excludes the idea of a fixed normal level of prices.

The effect of the exclusion of the idea of a "normal" from the "composite" system is to give it three points of clear distinction from the "constant price-normal" system. In the first place, as already noted, the nature of the stability achieved under the "composite" system relates only to the current

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of industry itself. The proposal to define strictly the meaning of "rapidity" would therefore seem undesirable even though it were possible.

situation. If it is felt desirable to go beyond this stage and to stabilise the price level with reference to its long-period movement, *i.e.*, to prevent the long-period displacement of the price level, this can only be done by introducing a recognised "normal" and holding the price level always within range of it, as would be done in the case of the "constant price-normal" system.

A second point of distinction would be in the width of fluctuation permitted. Under the "composite" system, it might happen that prices would continue for a long period on the upward trend, being accompanied by continuous prosperity; on the other hand, the movement might be continuously downwards, accompanied throughout by slight depression. In any event, relatively wide fluctuations of prices and of trade would be permitted.

The "constant price-normal" system would, on the contrary, permit no long-continued movement of the price level, and would consequently reduce all trade fluctuations to minor wavelets.

The third distinction relates to clarity of definition. Owing to the exclusion of the idea of a "normal," or a fixed position on which to stabilise, the "composite" system must at all times remain a little vague as to its mode of application and as to the precision with which it can be defined. It would be impossible to describe with exactitude either the manner in which the price index should be used,

or the relative weight which should be given to the subsidiary indices. (Needless to say, lack of definition permits a greater measure of discretion in the application of the system.)

These two alternative systems have been somewhat carefully described, because they represent, as precisely as may be, the opposing ideas of two sections within the wider group of those who favour the principle of price stability. The nature of the stability to be gained under the "constant price-normal" system is broadly representative of the desiderata of Carl Snyder and, I believe, the majority of the Cambridge School and of the Pollak Foundation. The "composite" system is roughly representative of the requirements of a considerable group of economists, who, whilst favouring the principle of monetary stability, have felt either that the general international situation has not yet reached a sufficiently stable condition to admit of the recognition of a "normal" price level, or that even in the future, when post-war complications have disappeared, the necessity for restraining the price level within the close range of a recognised "normal" would introduce a somewhat too undiscretionary element into the system. This point of view represents broadly the position assumed by a number of Harvard economists in 1922. It is not suggested here, however, that any of the above groups have necessarily reached their final decision in the matter; all that it is intended to indicate is

that there will arise in the future the need for deciding definitely between a system including the conception of a "normal" price level, as in the "constant price-normal" system, and a system excluding it, as does the "composite" system.

Since the discussion of these alternative systems is to occupy almost all the remainder of these pages, we might fix them more firmly in our minds by considering their application to a definite case, say, that of the American situation in 1924. The actual price situation in that country during 1923 and 1924 was as follows:

In September 1923 the index number of wholesale prices of the United States stood at 154,[1] which was also the annual average for 1923. By January 1924 the level had fallen to 151. It then followed the generally downward course: February, 152; March, 150; April, 148; May, 147; June, 145. This decline of prices was accompanied by a gradual fall in the employment index (Bureau of Labour Statistics) from 97 in February to 88 in June.

The application of the floating or "composite" system of stabilisation to this situation would have entailed action on the part of the Federal Reserve Banks similar to that which actually took place. The decline of prices, which was hardly appreciable in the winter of 1923–24, became rapid in the spring and early summer of 1924. Likewise, the decline

[1] U.S. Bureau of Labour Statistics, 1913 = 100.

of production and of employment, gradual in the beginning, became very marked about June and July. The summer of 1924 was, in fact, a period of serious depression. In these circumstances credit was progressively eased. The rediscount rate of the Federal Reserve Bank of New York was reduced from $4\frac{1}{2}$ to 4 per cent. on 29 April, then to $3\frac{1}{2}$ per cent. on 12 June, and finally to 3 per cent. on 8 August, 1924. This action was followed by a rise of prices, dating from July, and a subsequent gradual recovery of the labour market, and of production.

The application of the " constant price-normal " system would have been somewhat different. Assuming that the average for 1923, *i.e.*, 154, were being taken as the " normal " price level, it is to be seen that at the beginning of 1924 the level already stood below normal. In these circumstances the price of credit would already have been reduced below $4\frac{1}{2}$ per cent. and all measures possible by State and banking system would have been prepared for stimulating purchasing activity in the event of a further decline of prices. If the actual fall of prices had occurred as it did in March or April, immediate steps of a more drastic character would have been taken to restore confidence to industry and bring the price level nearer normal.

A converse situation might be imagined in which prices were showing a tendency to rise above the given normal. In the case of the " constant price-

normal" system, the upward swing would be restrained as soon as it showed any excessive divergence from the "normal." In the case of the "composite" system, which recognises no normal, no attempt would be made to check the movement unless it appeared to be of such a rapid nature as to give rise to immoderate extension and speculation, thereby threatening reaction and depression.

Let us then proceed to examine the application of these two systems, remembering their principal points of distinction. The "constant price-normal" system entails the attempt to cling fairly closely to a given normal, and will reduce trade fluctuations to the minimum practicable through monetary control. The "composite" system excludes the idea of a fixed normal and, since action under it is somewhat delayed, will permit a greater width of fluctuation.

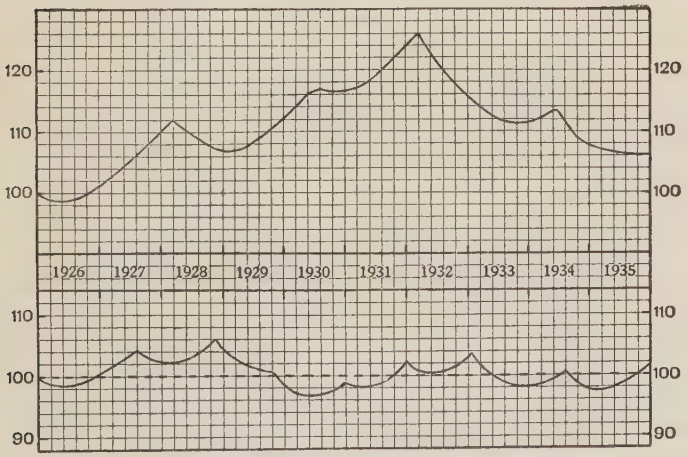
The application of these systems will be examined in the light of six tests, and the results of the examination will be balanced at the end with a view to determining, if possible, which system will yield the maximum satisfaction from all points of view. The tests are:

(i) Ease of application.
(ii) Effect on total long-period consumption.
(iii) Relationship to current conceptions of social justice.
(iv) Influence on industrial and social relations.

(v) Expediency from the international standpoint.
(vi) Expediency in relation to the Genoa Resolutions for a gold exchange standard.

It is evident that since the comparison is to be made between two alternative systems, both of which are relatively stable, no clear decision can be reached on certain of the above points. It is felt necessary, nevertheless, for the sake of completeness, to touch on all the possible arguments for and against the two systems, and so secure the widest possible basis for a decision.

PROBABLE NATURE OF PRICE FLUCTUATION [1] UNDER:
THE "COMPOSITE" SYSTEM



THE "CONSTANT PRICE-NORMAL" SYSTEM

[1] A tentative picture showing the difference in the probable width and length of fluctuation yielded by the alternative systems. (In an imaginative chart, minor fluctuations and irregularities cannot be represented. The smoothed and peaked curves shown above are probably typical of the general movement of the price index, though there are possible variations in the nature of the movement.)

PART II

THE ALTERNATIVE SYSTEMS OF STABILISATION COMPARED

CHAPTER II

EASE OF APPLICATION

In comparing the two systems of stabilisation, described in the previous sections, from the point of view of the ease with which they can be applied, it may be said forthwith that the "composite" system is evidently the easier of achievement; for it requires little more than that the controlling authorities use their judgment at all times. Their policy is not defined with such precision that they could ever be held definitely to have failed in its accomplishment. There remains then only the task of estimating the difficulty of application of the "constant price-normal" system, the examination of which will occupy the whole of the present chapter. In the subsequent five chapters a more definite attempt will be made to study the two systems side by side and judge their relative merits.

1. *Under the "Constant Price-Normal" System, Stability is Cumulative.*

There is reason for regarding stability as becoming, so to speak, cumulative, under the "constant price-normal" system. In the ordinary course of trade, the movement of prices, once it becomes general, sets up psychological forces which tend to amplify the original price movement. On a rising market, for instance, merchants buy more keenly and manufacturers are encouraged to extend. The additional activity called forth by rising prices stimulates demand and thus aggravates the initial rise. Under the "constant price-normal" system, however, the psychological influence of price movements would be reversed. An upward trend would signify that measures were soon to be taken for checking the movement and bringing the price level nearer normal; merchants would therefore be induced to restrain rather than increase their buying, and manufacturers would act with greater caution. Conversely, a marked downward trend would become a good omen; it would be the forerunner of very easy credit and of a general recovery of prices.

Thus, in proportion as the business community developed confidence in the ability of the State and the banks to restore prices to a given normal, the effort to achieve stability would be reinforced by the action of industry itself. The tendency to stability would thus become cumulative.

It is necessary, however, to pay some attention to the actual mechanism whereby the banking system and the State may regulate prices. For it is upon the real as well as the imagined efficiency of such mechanism that success ultimately depends.

Text-books on economics explain that the general level of prices depends partly upon the volume or fund of money available for use, and partly upon the rate at which that fund is employed. Both these conceptions seem a little difficult to grasp, however, and we might take instead, as the basis of our argument, a statement which seems as sound as it is simple, namely, that if it is possible to influence the total amount of *buying* in the community, it is thereby possible to influence prices. For if the community as a whole can be induced to increase its buying, manufacturers and others will be pleased to take advantage of the new demand by raising their prices, and the general level of prices will accordingly begin to rise. Conversely, if the community as a whole can be caused to restrain its buying, producers, finding themselves in presence of a failing market, will regretfully lower their prices and take what return they can get. From this it follows that any influence, such as the market rate of discount, which affects the borrowing, and therefore the total amount of buying, of the community, thereby affects the movement of the price level.

This conception falls in with the description of

trade fluctuations given in the introductory chapter, where it was indicated that the movement of prices and the movement of trade are interdependent, and that in order to regulate the general level of prices it is necessary to regulate the "average" movement of trade. This average movement of trade may be influenced, it seems, only by affecting the buying of a part of the community.

From such a hypothesis certain useful deductions may be made. In the first place, it is evident that if the movement of trade and prices has acquired no great momentum, the necessary compensatory action to restore it to normal would be of minor extent. By influencing the purchasing of only a fractional part of the community the required adjustment of the average movement would be achieved. The smallness of the influence required is even more readily perceived when it is remembered that any effect on the demand of one section is rapidly transmitted to others, for instance, from merchant to manufacturer, from manufacturer to wage-earner, from wage-earner to retailer, from retailer to merchant, and so on round the circle again, thus creating a wide diffusion and magnification of the initial effect on demand.

The primary task in the present chapter is to determine what instruments are available within the control of central institutions for influencing the buying of the community, and thereby the trend of trade and prices. It is necessary to investigate the

character of these instruments and determine whether they are at once powerful and delicate enough to render the "constant price-normal" system of stabilisation a practicable suggestion.

Taking first into consideration the possible influence of the central bank, it will be seen that the capacity of this institution to affect the current of trade and prices depends on two main considerations: first, the ability of the central bank to govern the market rate of discount [1]; and secondly, the influence which changes in the market rate of discount have, in turn, on merchants and others dependent on bank accommodation. The most suitable method of approaching the problem would seem to be to reverse the order of these questions and discuss first the effect of general changes in money rates on the buying of the business community.

2. *The Influence on Demand of the Market Rate of Discount.*

The merchant class is probably more generally dependent on bank credit than is any other group. The profits of this class are materially influenced by two factors: first, the change of price between the

[1] The term "market rate of discount" is used here synonymously with "discount rate" and the "price of bank accommodation," etc., to signify the rate at which the banking system in general will discount bills of exchange or extend loans to their customers. It is necessary to distinguish these terms from "Bank Rate," which is the minimum rate at which the Bank of England will lend to Joint Stock Banks in discounting their bills, and from "Rediscount Rate," the rate at which the Federal Reserve Banks of America will rediscount bills for Member Banks.

date of purchase and the date of disposal of the goods; secondly, the cost of borrowed capital. A rise in the market rate of discount thus tends to stem the buying of merchants, partly because it increases their costs, and partly because it threatens the level of prices. When it is known that the express object of the change of rate is to bring down prices, and that if it is not effective a higher rate will be enforced, then the change of rate will most certainly induce merchants to restrain their buying. It will consequently have a certain influence upon the level of prices.

Given, therefore, a " constant price-normal " system of price control, fully recognised and approved, and the knowledge that all movements of the discount rate are intended as regulative influences to effect some change in the price level, the reaction of any discount movement upon the merchant class would be almost instantaneous.

Even without such a system, the rate of discount is an extremely powerful force. This is partly as a result of its indirect influence on the rate of interest. The rate of interest on private savings moves in sympathy with the rate of discount, because the two forms of accommodation, private savings and bank credit, are to a large extent interchangeable as a means of financing industry. They are, so to speak, substitutes for each other, and when the price of one type of accommodation rises, the demand for the other increases and its price rises in sympathy. Moreover,

the total volume of private savings is to some extent dependent on the increase of purchasing power distributed initially from the banks in the form of loans. The restriction of loans which may be caused by a high discount rate is thus a partial cause of the limitation of the community's purchasing power, its income and its savings; and the consequent shortage of savings finds its reflection in a high rate of interest.

When both the rate of discount and the rate of interest rise, not only are merchants influenced, but all industrial enterprise is affected which is conducted with the aid of borrowed capital. Even a slight rise in the cost of capital, when regarded in the light of the average earnings of a firm estimated over good and bad years, is a most important consideration. And unless industry is quite intoxicated with the prospect of immediate profit, the influence of a minor change in the general cost of borrowing will be appreciable.

Perhaps the most important point is that *potentially* the influence of the discount rate is supreme. The gentle hand-pressure which is actually applied might, if necessary, become the squeeze of a vice. For this reason it is frequently not the movement of the rate itself, but the meaning behind the movement, which makes it fully effective. The so-called psychological effect of the discount change is the essential factor to be reckoned with. The point of special interest for this discussion is that the introduction of a known and recognised normal level of prices will add considerably

to this psychological influence and will cause the discount rate to become a progressively more powerful instrument. Just as, before the war, the warning note struck by the movement of the discount rate was heeded by merchants and others because they knew that the movement was dictated by the state of the gold reserves, so, under the " constant price-normal " system of price stabilisation, heed would be paid to the movement of the discount rate because it would be generally understood to signify a firm intention to secure some adjustment of the price level. One might press the comparison even further. Before the war, the weekly bank return itself, showing the state of the reserve ratio, was seized upon and scanned anxiously by merchants, as this was the first signal forecasting the future of money rates. Under the " constant price-normal " system, it will be the price index used by the bank which will be watched instead of the reserve ratio and will determine buying policy. It seems, moreover, that the movements of that index will be an even more powerful psychological influence than the reserve ratio used to be.

The influence of the market rate of discount may thus be considered both delicate and powerful. It has its immediate influence and its long-range effects; its real influence on costs and its psychological bearing on the general trend of confidence and trade. But how may this powerful instrument itself be regulated? It is evidently of little value to possess an efficient

piece of mechanism without the necessary skill to work it. No such lack of skill exists, however; the market rate of discount can be regulated, and with some measure of precision.

3. *The Regulation of the Market Rate of Discount through the Central Bank Rate.*

In actual fact, experience has shown that the market rate of discount, *i.e.*, the rate at which banks in general will lend money or discount bills in the market, can be controlled to some extent in any country where the banking system is highly centralised. If there exists a central bank which holds a portion of the cash reserves of other banks and has a certain monopoly over the right to issue notes, that central bank can influence the rate of discount of the general system by effecting changes in its own rate of discount. The essential problem in the control of the market rate of discount is, therefore, that of strengthening the influence which the central rate exerts upon the market rate.

In Great Britain, the question of credit regulation resolves itself into that of making the Bank Rate of the Bank of England effective in controlling the general rate demanded by the Joint Stock Banks. We know from generations of experience that the Bank Rate is actually effective in this way to a certain extent; but it would be most illuminating to learn exactly why this is so. Why, for instance, should the responsi-

ble official of, say, the Midland Bank decide to raise the rate of discount of that bank immediately he hears that the Bank of England rate has been put up; and what determines the precise position at which he ultimately fixes his rate? We are all creatures of custom, bank employees perhaps more than any; and the fact that the particular official we have in mind has inherited the custom of following Bank Rate movements from many preceding generations may be of no small importance. There must, however, be some more fundamental explanation, if only to show how the custom originated.

The explanations seem fairly numerous. In the first place, there is profit to be gained by raising the rate of discount to the highest possible point, since the rate of discount is the bankers' price for service rendered. And just as a manufacturer is prepared to compensate a rise in wage rates by a corresponding increase in prices, so, presumably, bankers are prepared to regard the rise of the central rate as an opportunity for raising their own. In the second place, the raising of the market rate in pursuit of the Bank Rate is almost essential in view of a certain further custom which London bankers have adopted, namely, that, immediately after there has been a rise in the Bank Rate, the representatives of the Joint Stock Banks meet and mutually agree to move their deposit rates in conformity with the alteration of the Bank Rate; in other words, if the Bank Rate has

risen, they decide to allow a higher rate of interest to depositors. Again, it is a little difficult to realise why they follow this excellent custom. But they do. And the consequence is important. The rate of interest allowed to depositors is one of the largest of the *costs* of banking, and when the costs are raised, the change must be reflected in the bankers' *prices*, *i.e.*, in the rate of discount which they charge to borrowers.

There are countries, however, in which there exists no such automatic link between the Bank Rate of the central bank and the rate of interest allowed on deposits in the general system; and yet the central rate is still effective in controlling the market rate of discount. Consequently, there must be some other powerful influences at work.

The actual position at which the Bank Rate stands has this important significance. As soon as the situation is reached when the general banking and money-lending system is experiencing a shortage of cash, the system will be compelled, or its clients, to borrow from the Bank of England. The general rate of discount will then be just what the Bank of England, the last resort, cares to make it. At all times, therefore, the market rate of discount hovers near the Bank Rate in anticipation of the time when that rate will in fact have to be paid. For if, by any chance, a Joint Stock Bank has been lending freely at rates much below the official Bank Rate, and then,

owing to a sudden shortage of cash, is compelled to have recourse to the Bank of England to replete its reserves, it will materially lose thereby. With the possibility always in the background that money may have to be borrowed at the official Bank Rate, lenders will be unwilling to lend at much below that rate and borrowers will be prepared to borrow at approximately that rate—a double circumstance tending to maintain the market rate of discount in close relation to the Bank Rate.

This influence is the more powerful, because the Bank of England has at its disposal the means of making its rate effective, at almost any time. It can create artificially a shortage of cash and so oblige borrowers to have recourse to itself for further loans. The method is simple; it merely entails the sale by the Bank of England of securities and other assets. By the sale of securities, the Bank of England can draw into itself, either cash previously held by other banks, or cheques redeemable by the other banks. This has the effect of reducing the balance of cash reserve held by the Joint Stock Banks at the Bank of England. Faced with a diminished reserve of cash, the Joint Stock Banks must follow one of two procedures. Either they must replete their reserves by discounting bills at the official rate at the Bank of England; in this case, any further loans they may make to their clients will be at the same rate in order that they may fully recoup themselves. Or they must recall loans,

mainly their day to day loans, from the market; in this case, the unfortunate borrowers will be compelled to resort to the Bank of England to replace their capital. In either case, the general market rate of discount rises to the level of the Bank Rate. The Bank Rate is then " effective."

The Bank of England may, of course, follow the converse method of purchasing securities and so rendering money market conditions easier. By thus, so to speak, forcing out more cash, it can press down the market rate of discount and render its own rate less effective.

It is to be seen then that the central bank has a dual instrument of control. By the movement of the central rate, it can cause an immediate and fairly wide change in the market rate of discount. And by the purchase or sale of securities it can, at will, either reinforce or detract from the influence of the central rate. These two forces can be used either in conjunction with each other or in opposition. The central bank is thus possessed of a mechanism which is capable both of powerful application and comparatively fine adjustment. There seems no reason therefore why, with the increasing knowledge of the reactions of this dual weapon, it should not be possible to use it as a regulator over the movement of the market rate of discount, and through that, of prices, in a constant, unbroken fashion.

A policy of price stabilisation should, in fact,

lend itself to a minimum of jarring and general disruption of money market conditions; and it should certainly cause less friction than was experienced under the pre-war regime of alternate expansion and contraction of credit, coupled with continuous vigilance over exchange rate movements and gold reserves.

If reference be made to statistics it is to be seen that periods of price stability have, in point of fact, been accompanied in the past by less fluctuation of the Bank Rate than have periods of boom and depression. That is to say, the most frequent and violent changes in the Bank Rate have occurred during periods of instability of the price level.

The evidence both of theory and of fact thus combines to show that the maintenance of price stability will entail actually less disturbance of the money market than did the task of circumscribing the cumulative swing of prices under the freer fluctuating system. The old adage: "A stitch in time saves nine" could find no truer application than in the question of preserving monetary stability. To act gently but immediately with a view to stopping inflation or deflation is clearly in accordance with all the canons of sane judgment and will avoid the necessity of more drastic action later. This is the nature of the policy which would be put into effect under the "constant price-normal" system described above.

4. *The Function of the State in Monetary Stabilisation.*

In the discussion which at present occupies our minds, namely, the ease of application of a policy of price stabilisation in accordance with the " constant price-normal " system, one important feature for consideration is evidently the rôle which the State may play in assisting the maintenance of stability. The evidence of the war and post-war periods has shown very clearly that the budgetary policy of any State may materially affect monetary conditions and industrial activity. In fact, the policy of Governments has probably had more influence than any other factor during these periods in determining the movement of the price level. The deduction from this is clear. By adopting in a mild way the same kind of measures as it was compelled to apply during the war, the State might usefully assist the price policy which central banks are endeavouring to apply.

In this connection it seems necessary to discuss first the kind of assistance which the central bank might want. There appear to be fairly strong grounds for believing that the restraint of credit will alone be adequate to stem an upward movement of prices. Consequently, in periods of prosperity, when prices are tending to rise, the assistance of the State is of minor importance. On the other hand, when business confidence is shaken, or when a certain surplus of

stocks has gathered and must be liquidated, the counteracting of the consequent fall of prices may not be easy. It is at such a period that it would be particularly advantageous for the State to intervene by pressing forward the execution of public schemes, and thus supplementing the demand of business itself. The question of importance is therefore to discover how this timely intervention may be effected. As already noted, what is required is a kind of process similar to that adopted during the war, but reduced in magnitude to the proportions entailed by the particular situation. During the war, State demand was increased and the expenditure was met in part, not out of savings or revenue, but out of bank borrowings; this meant a total increase of purchasing power and a consequent rise of prices. It is desirable that a similar policy should be applied during a depression, namely, that State demand and expenditure should be increased and that the expenditure should be met, not out of increased taxation, but by the creation of greater purchasing power through increased borrowing at the bank. For if, instead of financing public schemes out of additional bank loans, taxation is increased, the effect is to some extent merely that of transferring purchasing power from one section to another, rather than increasing the total purchasing of the community. The desired inflationary effect is thereby largely lost.

It is evident, however, that such a system of

borrowing from the central bank to meet expenses will increase the national debt during periods of depression; and in order to prevent this procedure from permanently increasing the total national debt, it will be necessary to arrive at some system whereby this increase of debt will be automatically compensated by a converse process operating during the period of prosperity.

The scheme proposed is as follows: the total cost of probable State expenditure on public works over a period of, say, five years would be estimated. Each year the appropriation from revenue for public works would be the same, *i.e.*, one-fifth of the estimated expenditure for the period. Each year the amount appropriated would be paid into a Public Works Fund and would be left there until required. The factor which would vary would be the amount expended. The amount expended would at all times depend upon the state of trade and the movement of prices. When trade and prices were in decline new works would be opened up and those in hand would be accelerated. When trade and prices were recovering, expenditure would be reduced.

Such a policy would be slightly inflationary in times of depression and deflationary in times of prosperity. For it is to be seen that in the prosperous times more revenue would be collected than spent, and the surplus would be deposited at the Bank of

England in part cancellation of existing debt.[1] Money would be taken out of the pockets of the taxpayers and would be cancelled, so to speak, by being returned to the bank.[2]

On the other hand, during depression, public works would be launched and would be financed, not out of taxation, but by withdrawals from the fund held at the Bank of England. This would definitely mean putting into circulation additional purchasing power.[3]

The operation of such a scheme as this would entail the appointment of a permanent Public Works Committee whose task would be to examine proposals for public enterprise and to pre-arrange a programme of operations. The programme would need to contain the maximum of enterprises which were capable of being expanded or reduced at will. The Committee would be required to maintain touch with local authorities in order to secure their collaboration in the scheme. The administrative difficulties confronting any proposal of this kind would evidently be

[1] As a matter of pure accountancy, the nominal amount of the National Debt of the country would remain constant and the Public Works Fund account would be increased by the amount credited to it from surplus revenue. In actual fact, the total indebtedness of the State at the Bank of England would be reduced.

[2] It is true that the bank could lend an equivalent amount to others, but only by inducing others to borrow by the reduction of the rate on loans.

[3] Again it is to be noted that the nominal amount of the National Debt would remain constant. But, by withdrawals from the Public Works Fund, the State would in actual fact be increasing its borrowings at the Bank of England, and would thus be creating new purchasing power.

very great.[1] Nevertheless, granted the existence of a permanent body of control, the difficulties would be progressively diminished, and there is reason to believe that a considerable measure of elasticity might ultimately be secured in the execution of public enterprise.

Given such elasticity, there remains the practical problem of deciding by what precise criteria the Public Works Committee is to judge when to increase and when to decrease the amount of work done. The employment index has sometimes been suggested for this purpose. This would, however, entail the establishment of a recognised normal level of employment, and the level chosen would of necessity be arbitrary. It is proposed here, therefore, that the criterion for judgment should be the same as that chosen for the control of credit, either under the " composite " system, or the " constant price-normal " system, as the case may be. Whatever the choice might be, the Public Works Committee should work in direct co-operation with the central bank, the two bodies joining forces to secure the operation of one or other of the price stabilisation systems. The system under discussion in the present section is the " constant price-normal " system. It seems that the State might materially assist the application of this

[1] For a detailed account of the administrative difficulties confronting any proposal for the advance-planning of public works, see the sections written by Professor Bowley and Mr. F. D. Stuart in *Is Unemployment Inevitable?* Macmillan, London, 1924.

system not only by increasing its demand at times when prices tend to fall, but also through the psychological effect of its intention to co-operate. The fact that the State was known to be collaborating with the banks with a view to establishing a certain normal price level would give that normal still greater prestige in the eyes of business men and would thereby facilitate its maintenance.

5. *The Forecasting of Price Movements.*

If stability of the price level in accordance with the "constant price-normal" system be the objective of monetary policy, it is evident that the application of the scheme will be assisted if other indices can be found to show the probable future tendency of prices. Granted the existence of such forecasting indices, anticipatory action could then be taken instead of merely compensatory action after the price movement has occurred.

Such forecasting indices as have been developed up to the present have for the most part been insufficiently sensitive to predict more than the broad cyclical movement of prices and trade. Nevertheless, the number and variety of indices are increasing; and the ability to forecast even minor fluctuations of the price level is approaching progressively nearer realisation.

There exist in the first place rather more than a dozen "business barometers" of different types

compiled by private statisticians or public departments in various countries, their purpose being to foretell the principal cyclical changes in industry, namely, the break from boom into crisis, and the change from depression to revival. As trade becomes increasingly stable these barometers will for the most part become gradually of less value, since they only interpret the broadest movements.

There have, however, been some new and important developments in the discovery of single series which are capable of forecasting the movement of trade and prices. Chief amongst these perhaps are the two indices compiled by the statistical staff of the Federal Reserve Bank of New York. The one is an index of the actual volume of trade. The other shows the rate of turnover of average deposits.[1] Both these indices penetrate below the surface elements of business activity and reveal the inner movements of production. They are highly sensitive to any internal change which may cause greater or less purchasing activity in industry and should, therefore, prove of the greatest value for the task of forecasting the general level of prices.

Further interesting investigations into the problem of forecasting trade and price movements have been made recently by Professor Irving Fisher.[2] There

[1] *Journal of the American Bankers' Association*, February, 1924.

[2] Quarterly Publication of the American Statistical Association, December 1923.

seems no doubt, in fact, that, when the principle of maintaining the stability of the general level of prices is accepted as the chief aim of monetary policy, the controlling authorities will have at their disposal adequate statistical material for their guidance. As a consequence of the continued research of statisticians, they will have not only full information of the actual position and the current tendency, but they will be able to read, in the sensitive indices compiled, the effect of every action they themselves may take.

6. *The Choice of the Price Index to be Stabilised.*

Since one of the main purposes of stabilising prices is to smooth out fluctuations in the course of trade, the index of prices chosen as the one to be stabilised should presumably be that which is most sensitive to industrial movements; in other words, the index which most fully and rapidly reflects changes which occur in the development of industry should be chosen. For this reason it would seem that the further back one can penetrate into the early processes of production in securing the various prices to compose the index number, the more sensitive will be the index yielded. The endeavour to secure sensitiveness should not, however, prejudice the representative character of the index, which should necessarily include all materials entering to any considerable extent into consumption.

The actual choice of the index to be stabilised would

presumably rest with the body in control, the central bank, which would doubtless be able to command the services, not only of official statisticians, but also of private expert organisations, such as the Pollak Foundation for Economic Research, with a view to determining the most suitable price index for interpreting the relative state of demand and supply in industry.

7. *The Method of Applying the "Constant Price-Normal" System.*

The idea that the imposition on the banking organisation of the "constant price-normal" system would cause the whole of the organisation to become merely the slave of a price index, and destroy any possibility of its using judgment or discretion, is somewhat misconceived. The task of regulation under such a system would be more discriminating than anything which was required of the pre-war servants of exchange fluctuations and gold reserves. Regardless of the scientific task of selecting the best price index to be stabilised and then of forecasting its probable movement by means of other indices, there are many refinements and developments possible in the actual application of the "constant price-normal" system.

Let it be assumed that the actual price index to be stabilised has been chosen, and that a certain level has been recognised as "normal." The task of the central bank would then be, not to render that level an

absolute normal in the sense of causing it to become the average over given periods, but merely to prevent the price level from diverging far from the recognised position—so-called "normal"—at any time. It might even be preferable to aim at keeping the price level at all times very slightly below the recognised normal. For, so long as it stood in such a position, merchants and industry in general would anticipate rather a rise than a fall of prices, and would continue to buy and to produce in all confidence. They would in fact be assured that any further decline of the price level would be followed immediately by strong measures on the part of the State and the banks for producing revival.

Not only would the actual use of the normal itself be discretionary in this way, but the limits of fluctuation from the normal would also be determined by the controlling authority and would initially be experimental. The principal task confronting the controlling authority would be to strike a compromise between stability of the price level and stability of the price of credit, the former being regarded as the chief aim of the policy. In other words, price stability would be the aim; but it should be secured with the minimum of discount rate movement.

Furthermore, it would be at the discretion of the central body temporarily to disregard fluctuations in the general level of prices if they were caused by accidental conditions such as strikes, seasonal failures,

or the sudden temporary development of a single industry.[1] Needless to say, the controlling authority would not permit the price level to diverge so far from the recognised normal that it would be impossible for business to recognise the normal further. In that case the whole system would obviously break down.

With such discretionary powers vested in the controlling authority, the introduction of a recognised

[1] The argument is frequently advanced that whenever any single industry tends to boom, the natural outward expression of this condition is a rise in the price of the commodity produced by that industry. It is said that such a rise of prices is desirable in itself, and that it should also be rendered possible without adversely affecting other industries. Under a very rigid system of price stabilisation, however, this would not be possible; for any marked rise in the price of one commodity would have to be offset by slightly pressing down the level of the remainder, which would not be desirable in the interests of the whole. Rigidity in the system of price stabilisation should therefore be avoided.

Whereas agreement is felt to some extent with this argument, and the proposal is therefore made above that the banks should use their discretionary power, within the limits of the "constant price-normal" system, to make the necessary allowance for local price movements, it is nevertheless felt that the argument is frequently both over-emphasised and wrongly stated. If the price of the commodity of any industry rises relatively to that of others, this shows a willingness on the part of the community to change the direction of its spending, *i.e.*, to increase the amount expended on the one favoured commodity by decreasing the amount spent on others. A fall in the prices of the other commodities would follow as a natural consequence. Such a fall would in fact be inevitable unless there were an expansion of the total purchasing power of the community. If such an expansion were to be contrived by the banks, it would constitute a measure of inflation, since it would mean issuing an added dose of purchasing power, without a corresponding increase of goods. Thus, if this principle of creating a general increase of purchasing power, every time there occurred a rise in the price of the goods of a single industry, were carried into effect as a regular policy, its ultimate result would be serious and continuous inflation. It is felt therefore that allowances for local price movements should only be made in very exceptional circumstances, and should only be temporary in effect.

normal level of prices need, it seems, cause no serious jarring or disruption of money market conditions. The method of its application would be sufficiently flexible to make for smoothness in all spheres of economic life.

CHAPTER III

PRICE STABILITY IN RELATION TO CONSUMPTION

The preceding section has been devoted almost exclusively to the examination of one system alone, the "constant price-normal" system, from the point of view of the manner and facility of its application. It was decided at the outset that the somewhat indefinite "composite" system was the more easily applicable of the two systems under discussion, since it merely required the controlling authorities to do the best they could in accordance with criteria which lacked absolute precision. The main purpose of the foregoing section was therefore to show that the "constant price-normal" system was of such a nature as to avoid serious disturbance in the money market, whilst securing stability in other economic spheres. If that conclusion is acceptable, the two systems may be regarded as almost equal, for all practical purposes, from the point of view of friction-less application.[1] We might then start with a virtually

[1] On the other hand, if the conclusion of the previous chapter should not prove acceptable, and it be thought that the preservation of a constant price-normal could not be effected without serious economic dislocation, the discussion need not be continued. For this would be a vital point of objection and the "constant price-normal" system would thereby be ruled out.

clean balance sheet in comparing the two systems side by side in relation to the five remaining tests.

The test to be applied in the present section is to determine which of the systems will yield the higher level of consumption. Up to the present stage, the general question of price stabilisation has been considered more particularly in relation to maximum production. Consumption is, however, the ultimate objective of production; consequently, for the final analysis and comparison of the two systems involved here, it would seem desirable to bring into greater prominence the real purpose to be attained, namely, consumption.

A further introductory note would seem necessary to the effect that in the discussion which has already been given to the general question of price stabilisation in its relation to production the broad conclusion was reached that the stable regime would yield a greater average level of production, because it ensured the continuance of healthy markets. However, the question to be examined here is of a rather finer character. It is the comparison of two relatively stable systems. Under the one, the " constant price-normal " system, it may be taken that the highest degree of stability practicable will be reached. Under the other, the freer " composite " system, fluctuations will tend to be somewhat wider and longer, but will nevertheless be devoid of violence. The attempt is thus being made to compare a state of minimum

fluctuation with a somewhat greater, though not very extensive, measure of fluctuation.

It seems evident from the outset that no very clear conclusion can come out of such a discussion. The point is one which can never be examined statistically. However, it may not be altogether fruitless to pass certain theoretical arguments in review. One method of determining the relationship between price fluctuations and the average level of consumption, is to show the bearing of price movements on the accumulation of stocks, and then in turn indicate the effect of the accumulation of stocks on the volume of consumption.

1. *Price Fluctuations and the Growth of Stocks of Commodities.*

During a period of rising prices and active trade, stocks with merchants and middlemen tend to accumulate, partly because it is advantageous to hold sufficient stocks to satisfy all the requirements of customers, partly because the market seems assured and the risk of holding stocks is less, and partly because the rising value of the stocks offsets the cost of holding them in store. During depression the last two causes are reversed, and stocks with retailers and merchants tend to decline. Thus, when prices rise, stocks accumulate in shops and stores; when prices fall, liquidation ensues, and stocks begin to dwindle.

Proceeding then to the second stage, and relating

the fluctuation of stocks to the volume of consumption, it is to be seen that the first effect of the augmentation of stocks is to hold goods off the final market, that is, to reduce final consumption below production. Hence, during a period of rising prices, when stocks begin to grow, final consumption is thereby restricted to a certain extent and held below the level of production. This disadvantage would perhaps be of no importance provided that it might be compensated by stocks being subsequently thrown on to the market and absorbed without causing the cessation of enterprise. Such a solution is not, however, possible. The process of subsequent liquidation of surplus stocks invariably causes a certain stagnation in industry itself, thereby producing unemployment, diminishing the consumption of wage-earners, and checking the demand of business in general. The accumulation of stocks has thus the effect of reducing consumption below the level of possible production not only during the boom but also during the subsequent period of liquidation. It may justly be concluded that, other factors remaining constant, the wider the fluctuation of stocks, the greater is the tendency for total consumption to be reduced.

There seems reason to believe, further, that the width of fluctuation of stocks would be proportionate to the width of fluctuation of prices. And this would probably apply, even though the price movement were relatively slow. For the accumulation of stocks on

the shelves of a warehouse or in the store-rooms of an ordinary retailing firm is a process which goes on almost unobserved, or is largely disregarded, during a period of prosperity; and it is only when the market is beginning to fail and when prices are breaking, that the careful restriction of stocks to what is essential takes place. A long, unchequered rise in prices would thus permit the gradual and continuous accumulation of surplus stocks, all of which must, sooner or later, be liquidated. It would seem therefore that, for the purpose of stabilising the volume of stocks held, it would be desirable that there should be frequent (and less extensive) checks in the process of expansion. If this may be accepted, then the " constant price-normal " system with its more frequent though less extensive fluctuations would prove more beneficial from the point of view of stabilising stocks, and thereby maximising final consumption, than would the " composite " system with its more ample fluctuations of prices and of stocks.

2. *The Speculative Stimulus.*

The conclusion of the preceding paragraph has been qualified earlier with the proviso: " other factors remaining constant." There are other considerations. The more unstable regime may, by the introduction of rather more risk, or of a greater speculative element, act as a stimulus to industrial enterprise. By holding out the prospect of great gains, however chimerical,

it may act as an incentive to production in anticipation of real or imaginary consumption. If it has the effect of increasing the demand of producers, it will thereby increase the demand for labour of all kinds, up to the limit of employment; and, up to that limit, it will increase the total consumption of the community.

The same speculative stimulus may be the cause of the introduction of new methods, of expensive experiments, and of bringing forward more efficient industrial leaders, all of which tends at least to brighten the prospects for the future, whatever it may do for the present. If it leads, in fact, to greater efficiency of production in the long run, then it must add to total long-period consumption.

There may, however, be some danger of exaggerating this argument. The question involved is again of such a character as not to be susceptible to statistical test, and therefore it is impossible to do more than throw out a few suggestions based on the psychology of business. For the purpose of clarity, it might be convenient to consider the influence of the speculative stimulus in the two separate spheres : in manufacture, on the one hand ; and in commercial activities, on the other.

In the purely manufacturing sphere, invention and experiment are eminently desirable and should receive all the encouragement possible. But it seems questionable to what extent the speculative stimulus

does in fact assist the progress of invention. For instance, if an invention is really good, will it not find its way into use in a comparatively stable regime as certainly as in any other? Is the inventor really concerned about the state of general economic activity when he works out his new device? And when he brings it forward, does not the manufacturer consider its use in the light of long-period results rather than of chance profits?

Again, is it not the *average* prosperity of a firm or an industry which in the long run determines the total amount of experiment undertaken, rather than purely transitory conditions? Finally, is there not a risk, if the transitory conditions are in certain cases used, in fact, as a basis for new developments, that the experiments may turn out more frequently disastrous than successful?

Then, as regards the argument that fluctuating trade and high risks bring out new industrial leaders, does not the evidence of the past tend towards the belief that the best men have come forward in spite of, rather than as a result of, circumstances? And will they not always find their way to the front in spite of stability? Moreover, does not the period of boom, which is supposed to assist the introduction of new blood, harbour and consolidate much that is inefficient through the indiscriminate scattering of unearned profit? It would seem, indeed, that although the chance gains yielded by fluctuating

trade may act as a certain stimulus to initiative and vigour, yet many compensating disadvantages are at the same time introduced. For, at all times, the greater the risks involved, the bigger the toll taken of industry by the principal risk-takers, and for a service which would be unnecessary in a stable regime.[1] Hence, there seems reason to doubt whether, even in the purely manufacturing sphere, there is any balance of advantage to be gained from added risks.

As far as commercial development is concerned, expansion based on chance prosperity or highly speculative prospects is bad. The accession of large numbers to the ranks of middlemen during a period of rising prices, and the growth of speculation when risks are great, can do nothing to increase production or final consumption. It will almost inevitably result in widening the fluctuation of stocks and in this way reducing total consumption.

All these unco-ordinated questions and suggestions would, however, require the test of wide business experience before being used as a basis for any clear conclusion, and when such a fine issue is at stake it would be premature to attempt to estimate the long-run influence of the speculative stimulus as it affects either of the two systems of price stabilisation under examination. Both of these are in fact based on the principle of the general exclusion of speculation.

[1] For a more comprehensive argument on these lines, see J. M. Keynes, "A Tract on Monetary Reform." Macmillan, 1924.

Even if the comparison to be made were between a widely fluctuating regime and that of maximum stability, the difference caused in the progress of invention and organisation through differences in the speculative stimulus would appear to be of small account. Consequently, the comparison of two relatively stable systems cannot be expected to yield a decision much in favour of either system. It may be permissible, therefore, to proceed to the next test on the assumption that the balance sheet still shows no pronounced advantage on either one side or the other.[1]

[1] It is not suggested here that all the possible tests have been exhausted which would assist the decision as to the nature of the price stabilisation system which would yield the maximum consumption. But it is felt, nevertheless, that, whatever the test, little advantage is likely to be shown in favour of either of the systems discussed here.

Sometimes the suggestion is made that the system which would yield the best results would be neither of the above-examined, but one under which a gradual and continuous rise of the level of prices would be contrived. Such a system has been excluded from discussion here because it could not be operated in any monetary system based on gold. When the expansion of credit is ultimately limited by the gold supply, as is the case under any form of gold standard, then the rise of prices is also limited. The proposal for a continuous gradual rise of the level of prices, even if desirable, has no relationship with current practical conditions.

CHAPTER IV

SOCIAL JUSTICE

1. *The Meaning of Justice.*

Social Justice is a quite indefinite conception. Centuries of thought have been spent in the endeavour to give greater clarity to its meaning; but from the inherent nature of the subject itself it will consistently frustrate any attempt to give it clear and final definition.[1] The reader is advised therefore that the present notes are not intended to penetrate deeply into the philosophical aspect of the subject, but merely to gain some appreciation of current ideas in regard to social justice and, if possible, apply them to the principle of price stabilisation.

In any practical problem involving social justice,

[1] The idea of justice has been interpreted by philosophers as renowned as Plato to mean that state of affairs when each individual in the economic world is performing his task efficiently and when the qualifications of each man are adapted to his function. This conception of a world based on the principle of efficient service is doubtless ideal and has a practical value in assisting the development of our standards of judgment. The main practical object of discussions of social justice is, however, to determine how this idea may be infused into social and economic life as we know it now. The attempt is made in these lines therefore to determine rather what may be the common conception of social justice *in present times* and how this conception may be applied to current problems, in particular, that of price stabilisation.

the final decision always depends, in actual fact, on the criteria or the standards of judgment current at the time. If the standards of judgment change, then so does the conception of social justice. And standards do change from one era to another. A hundred years ago an employer had the right to engage workers under almost any conditions he cared to stipulate. But this right is being progressively restricted and confined in accordance with new standards of what is just; and every decade shows a slight change in the general standard of judgment as regards this particular right.

This state of flux and variation in the standards of judgment renders the conception of what is just a little obscure at all times. Nevertheless, however vague they may be, it is these current standards of judgment which actually count in the determination of rights; and it is therefore these standards which are the essential factor to be studied and appreciated in any practical problem to which the idea of social justice is to be applied.

Thus, the solution of any new problem must largely depend on the solution already accepted for other cognate problems. Principles already approved and in operation must be respected in any new decision. This need for basing any decision on generally accepted principles is evident when it is considered that no two individuals, when judging a case quite independently, hold exactly the same opinion. Any one person

founding his judgment on his own purely instinctive impression of right and on his own logic, would reach a slightly different conclusion from that of any other. Confusion would inevitably ensue if any actual practical judgment were based upon independent opinions. Imagine, for instance, the chaos which would result in any civilised country if, in the practical application of the law, judges were not bound strictly by the established code and by precedent. Consistency in legal decisions is essential. And in order to secure this, the law itself, which is a kind of consolidation of the public sentiment, lays down the principles and the judge interprets them largely according to precedent. Both the law and its interpretation are based on tradition, the former having been built up, stage upon stage, from foundations established more than a thousand years ago; the latter developing gradually and cautiously so as to eliminate inconsistency with previous decisions.

The question involved here, namely, that of applying the conception of social justice to the problems raised by price movements, has not yet fallen directly within the scope of legal decisions. The method of treatment should nevertheless be the same in principle. If the judgment to be given is to be of any practical value, it should not be an independent opinion, drawing inspiration from the ideas of any single individual. It must be based as far as possible on general current opinion, on existing standards, and

on the traditional background, in so far as these can be appreciated. It must take the fullest possible account of such precedent as exists. The practical task is at all times to apply current conceptions of social justice to a current situation.

2. *Price Fluctuations in Relation to the Current Idea of Social Justice.*

It has been stated that the application of the idea of social justice to any given conflict of interests means the establishment of a due balance between these interests in accordance with current standards of judgment. Much difficulty will be experienced, however, in applying this process to the problem created by price fluctuations; for the interests involved are most complex in character. Not only are the parties concerned in the problem very numerous, but they are each affected in different ways at the same time. For instance, a falling level of prices may affect the worker adversely by rendering his occupation less secure, and favourably by increasing the real value of his wage. Consequently it is difficult even to estimate what may be in the interest of any given party, without passing to the still more complicated stage of weighing one party's interest against that of another.

The intricate character of the problem can be illustrated to some extent by a brief review of the arguments which have been put forward in favour of different price policies. The outline given below

of such arguments is not intended to be exhaustive, but merely to indicate something of the number of the parties concerned and the uncertain way in which they may be affected.

(*a*) It is sometimes urged, in opposition to a gradual upward trend of prices, that such a movement, by progressively paring away the real value of money and of past savings, is doing injustice to the thrifty. This seems sound, but it is in conflict with the feeling that the diminution of past reserves is fully justified when it removes by degrees the value of hereditary windfalls which are passed on from generation to generation, and bear no relation to the merits of the beneficiaries. The reply to this, in turn, is that the correct method of dealing with the question of inheritance is by a carefully discriminating system of taxation, and not by a general fluctuation of prices, the full effects of which are unknown and uncontrolled.

(*b*) It is sometimes emphasised in favour of price stability that the stable regime is the only one under which justice can be secured between debtor and creditor. When a man makes a loan he should receive in repayment of debt exactly the value that he lends. A rise of prices occurring during the period of the loan causes him to lose, for, with the return of his money, he receives less command over commodities than he has initially yielded up in making the loan. A rise of prices thus causes injustice to the lender. On the other hand, if prices remain stable

during the period of the loan, then the lender receives, when his money is returned, exactly that command over commodities which he had initially transferred to the borrower. This is considered a square deal.

(*c*) But why should *commodities* be the standard of measurement? Why should not *effort* be the measure? It is surely the sacrifice or effort initially represented by the loan that should be exactly compensated when the debt matures. And in that case the return in commodities would have to be greater in proportion as the productivity or efficiency of effort had increased during the period of the loan. This would entail a gradual decline of prices, for justice to be done.

(*d*) Yet another standard of measurement might be suggested: that of utility. Whatever the money was actually worth to the lender originally, from the point of view of his general satisfaction, should be returned to him. This criterion would entail a gradual, though indeterminate fall of the price level.

Thus, according to the two last criteria, justice between debtor and creditor would be more nearly achieved by a slight fall of prices than by a constant level, so long as the efficiency of effort increased.

(*e*) There are further considerations, however. A decline of prices, by increasing, at least temporarily, the real value of wages, ensures a larger proportion of the product of industry being distributed among such workers as are employed. This advantage

would be offset by the fact that the failure of profits accompanying the decline of prices would act as a brake on industrial expansion and would increase unemployment. The total wages bill of the community would probably not increase; but those in regular occupation would gain at the expense of the unemployed.

(*f*) During a decline of prices, holders of gilt-edged securities gain through the rise in the real value of their holdings. But those responsible for the management and conduct of industry, the proprietors of ordinary stock, lose severely at the same time.

(*g*) A decline of prices adds to the burden of Government debt, expressed in commodities. If the efficiency of effort increases in proportion to the decline of prices, then the real burden, expressed in effort, remains constant.

It is to be seen that man is affected by price movements in his capacity as labourer, entrepreneur, stock-holder, bond-holder, debtor, creditor, inheritor and taxpayer; in fact, in almost every civil and industrial capacity. Sometimes he may be affected adversely in one way and favourably in another. How then may it be possible to distinguish what nature of price movement will produce the most just balance of interests? By what process can it be decided, for instance, which of the two price stabilisation systems, "the constant price-normal" system and the "composite" system, will yield the most

satisfaction, due regard being had to all interests. This is the problem, in fact, of which the foregoing summary is intended as introduction.

The principal point of importance which will assist the conclusion is that the solution required is not one based upon an individual or independent decision as to what is most desirable. The solutions given in that case would be as varied as they could in the nature of things be; they would range from the advocacy of endless inflation, on the principle applied in communistic Russia, to the recommendation of slight deflation in proportion as the productivity of industry increased. For a satisfactory solution, the problem must, however, be taken out of the realm of individual opinion into that of general opinion. If any evidence can be found, either in custom or in legal codes, which will throw light on the subject, or if any traditional or general sentiment can be invoked, these are the considerations which must form the basis for a judgment. The practical problem, be it said once more, is to apply current accepted principles to a current situation.

3. *The Right of Property.*

Amongst the principles which are formally established both in law and custom, is that of the "right of property." This "right" has taken a fairly concrete form, and is sufficiently stable in its essential principle to form the basis of any relevant present-day

problem of social justice. It is true that minor modifications are constantly occurring in the detailed application of the right, and there may even, at some distant date, occur a fundamental change in the right itself. But the rate of change is slow and the main principle involved is one which is almost universally accepted, both in legislation and opinion. It thus forms a solid basis for the examination of the practical problem of social justice.

When interpreted, the right of property means intrinsically the right over tangible goods or commodities. Thus, if an individual owns a quantity of tangible goods or commodities now, his right is recognised and defended by law—to continue holding these same goods indefinitely. The right of property relates essentially to the unimpaired command over commodities.

Public opinion and the law are in complete agreement on this point. If any man owns property and another deprives him of part of it by force or stealth, there is a public outcry. A burglary or theft offends the common sentiment of what is right.

So it is that when a man's property is reduced, not by the action of another man, but by fluctuations in the value of money, public sentiment is equally offended. When the property or goods of one section of the community are indiscriminately increased at the expense of others, whether it be by direct action or whether it be by the changing value of money, the

general feeling is that injustice has been wrought. Society has, in fact, been taught through generations of the application of the "right of property" to think in terms of commodities as the essential measure of possession; and when a person's holding of commodities is impaired indiscriminately, by no matter what means, this appears to be an offence against the canons of justice.

To take a specific case; a person who owns property in the form of goods, decides, for convenience, to convert those goods into money. He holds that money for a period of time, during which prices rise, say, 10 per cent. As a result of this rise of prices he loses, in his command over real property, some 10 per cent. Other people have, in the meantime, gained by the same amount. Society as a whole would condemn this as unjust. For instance, a representative cross section of the community, if interrogated, would almost unanimously hold that the price fluctuation had caused injustice. And they would feel instinctively that the only just regime would be that in which the price level remains stable. This would be their instinctive reaction because for centuries they and their forefathers have been taught to regard the ownership of property, as such, to be inviolable. The "right of property" is, in fact, an intrinsic part of each man's social code, as well as forming one of the pillars of the law itself.

The conclusion is reached, therefore, that a stable

level of prices is just, essentially because it is felt to be just according to present-day opinion. A stable price level is the only condition which will satisfy the existing canons of justice as expressed in legal principle and customary thought.

If this may be regarded as an acceptable and practical conclusion, it is an obvious further step to say that in order to give full satisfaction, the desired price stability should be effective, not only over short periods of time, but also over long periods. And in order to secure long-period stability of the price level, it will be necessary to introduce into the system of stabilisation a recognised " normal " level of prices as a fixed position to which the price level may be permanently anchored.

This leads to the principal conclusion regarding the choice between the " constant price-normal " system and the " composite " system of price stabilisation. The essential difference between these two systems lies precisely in the point mentioned above, the ability to secure long-period stability of prices. The " constant price-normal " system not only aims at diminishing the short-period fluctuation of prices, but also at obviating the long-period displacement of the price level. It thus satisfies as fully as is possible the requirements of current conceptions of justice. Under the " composite " system, however, only the current price movement is regarded, the long-period change being left entirely to hazard.

Consequently this system will only satisfy the present conception of justice in a minor, temporary way.

4. *Considerations of Expediency.*

The principle of expediency yields certain further arguments in favour of the introduction of a recognised "normal" into the system of stabilisation, so as to secure long-period stability of the price level. Money is a measure. Most frequently it is a measure of goods. All other measures, the yard, the gallon, the ounce, are also measures of goods. For convenience, it would be desirable that money, like these other standards, should be an unchanging measure of goods. For instance, it would be a convenience to a business man submitting estimates for long-period contracts, or to an insurance company calculating risk, or to a society computing its costs, or to a Government establishing sinking funds, if they were assured of the long-period stability of prices and costs.

Furthermore, the world is organised, as far as man can judge, on a rational basis. The more reason and foresight that can be introduced into the system, the more rationally and efficiently organised can that system become. In order that men may act on reason and foresight they must have knowledge; they must have accurate data on which to base their decisions. The element of certainty would be enhanced if the price basis, on which every branch of industry and

every social service works, were a known quantity for a considerable period into the future.

The principles of expediency and rational organisation thus support that of current justice in showing the need for long-period stability of the price level. As already noted, this can only be done by introducing into the system of stabilisation a recognised normal level of prices, as would be done in the case of the " constant price-normal " system. The " composite " system would prove unsatisfactory in that only by a series of chance effects would it produce long-period stability of prices, and at no time would the future price situation be known with any degree of certainty.

It should be emphasised, however, that the arguments which have been adduced here under the heading of social justice can make no emotional appeal. They are based essentially on considerations of custom and expediency. Furthermore, they merely tend to show that if it is the current conceptions of social justice (these may not necessarily be far advanced) which are to be taken as the basis of judgment, then the " constant price-normal " system will yield the fullest measure of satisfaction. This system will, in fact, fit most logically into the present economic order and will facilitate the rational conduct of industrial and social enterprise.

CHAPTER V

INDUSTRIAL AND SOCIAL RELATIONS

In the preceding sections the considerations involved have been of such a varied and conflicting nature that it seemed difficult to reach any final decision in favour of either of the systems examined. The issues raised by the remaining three tests are, however, much clearer, and enable conclusions of a more definite character to be drawn.

The test to be applied in the present section is that of the influence which the alternative systems of price stabilisation may have on industrial and social relations, the object of the test being to determine which system will prove most favourable to the development of social harmony in its widest sense. As in the previous sections, the most suitable method of approach would seem to be that of passing in review the arguments relating to price stabilisation in general, and then applying them to the two particular systems of stabilisation under consideration.

1. *The General Connection between Price Changes and Industrial Relations.*

It has already been noted that a change in the level of prices infers a change in the value of money as a

means of purchasing goods. If, for instance, prices rise, then all holders of money, or of securities of fixed money value, or of any other title to goods expressed as an unchanging amount of money, must lose; for their money will no longer buy for them the same amount of goods. Hence, the value of money depends upon the movement of prices. Thus, with a rise of prices, all creditors for fixed sums of money suffer loss, and their debtors gain an equivalent amount. With a fall of prices it is the debtor's turn to lose. Every change of prices means that one section gains at the expense of others. Accordingly, whenever prices fluctuate, grievances inevitably arise, and lead to general discontent.

It is true that the victims of a change in the level of prices are not apprised of their loss quite in the above theoretical way. What usually happens is, for instance, that the housewife begins to find that her weekly allowance will not go as far as before, and that she is having the utmost difficulty to make ends meet; or, on the other hand, employers discover that their profits are dwindling because, whereas real costs and overhead charges remain high, prices are falling and the value of the stocks they hold is declining. There can be no question, however, that, with a change in the level of prices, not only is there inevitably a change in people's real incomes and their ownership of real wealth, but those who suffer by the change are rapidly aware of their misfortune.

Often, however, they only see the ill effects and do not appreciate the fundamental cause; and consequently, instead of turning their wrath upon the monetary system which permits indiscriminate fluctuations of the price level, they cast suspicion on whatever class happens to be their traditional enemy. If that enemy appears to be gaining, as he frequently does, then it is inevitable that war will be declared. Strikes and lock-outs multiply; and everywhere the feeling grows that each section of society is surreptitiously endeavouring to profit at the expense of others. Yet, throughout the whole period of dislocation, the price fluctuation, which is the real villain of the piece, is almost unobserved and escapes the attention it deserves.

This broad impression needs perhaps more analytical treatment to be of any practical value; and it might therefore be advisable to examine more closely what actually happens as between the employing and the employed classes during a period of price fluctuation.

During an upward trend of prices, concomitant with active trade, profits invariably run high. In many instances, and in the average or typical case, some of the profit is due to the fact that wages lag somewhat behind the rise of prices. It is true that during this period the financial situation of the workers is also sound, but this is due, for the most part, to greater employment, which more than offsets the decline of real wages per hour. The whole period

of rising prices is, in fact, one in which wage-earners are attempting to catch up the cost of living with their wage-rates. In this perpetual struggle, relations are much embittered by the feeling that the apparent gains of their employers, resulting from the rise of prices, are secured largely at the workers' own expense. Thus, an upward trend of prices, by causing a corresponding increase in living expenses, leads inevitably to demands for higher wages, arising in circumstances which make for distrust and resentment rather than for amicable agreement. A serious outburst of industrial disputes almost invariably ensues.[1]

During the downward trend of prices the process is somewhat different. In such a period it is the employer's turn to feel himself unjustly penalised. On the one hand his market is weak; profits are dwindling; and prices have fallen out of all proportion to the original costs. On the other hand, wages are still relatively high, and represent in the employer's mind the outstanding obstacle to his continued solvency. It is inevitable, then, that during a decline in prices there will be insistent attacks on wages by employers, leading to an increase in lock-outs and in strikes against reductions.

Thus it may be expected that in any period of serious price fluctuations there will be a considerable growth in the number of industrial disputes. During the upward movement, the struggle to adjust wages

[1] For statistical evidence, see later.

to the cost of living, and during the decline the attempt to bring wage costs into conformity with the new level of prices, provide a constant source of friction leading frequently to open conflict.

2. *The Relative Influence of Rising Prices and Falling Prices.*

The above broad conclusion may justly be taken as the fundamental basis or starting point of any discussion of the relationship between price changes and industrial disputes, but it leaves much of interest still to be examined. Statistics show, for instance, that the two movements—the rise of prices and the fall of prices—are not equally effective in leading to actual stoppages of work. Rising prices are as a rule accompanied by more strikes than falling prices. In illustration of this point, the table on page 87, showing the monthly totals [1] of disputes for Great Britain from 1919 to 1921, yields useful evidence.

It is to be remembered that in Great Britain prices were soaring rapidly from the spring of 1919 to the early summer of 1920. During this period there occurred, as revealed in the table, a vast swelling in the number of industrial disputes, the main cause being the demand for higher wages. The upward swing of prices broke in the summer of 1920, and was followed by a lull in the number of disputes. Then

[1] These totals are apparently provisional, but they may be considered satisfactory for general long-period comparisons.

Wage Disputes in Great Britain by Months, 1909 and 1919–1921.

	1909.			1919.			1920.			1921.		
Month.	T.	A.	R.	T.	A.	R.	T.	A.	R.	T.	A.	R.
Jan.	28	7	7	105	29	—	86	43	—	44	8	15
Feb.	19	5	3	62	34	—	122	56	—	63	11	26
March	17	6	5	64	32	—	184	106	—	42	9	22
April	24	5	4	85	47	—	134	74	—	43	0	26
May	26	8	2	170	103	—	204	141	—	65	0	38
June	16	2	2	127	83	—	183	111	—	29	0	16
July	41	9	3	126	70	—	147	102	—	40	0	20
Aug.	39	16	1	91	41	—	139	81	—	62	0	34
Sept.	19	3	1	90	54	—	93	56	—	57	0	25
Oct.	31	8	2	53	32	—	71	35	—	64	0	35
Nov.	24	3	1	48	23	—	60	31	—	74	0	41
Dec.	8	0	1	61	36	—	34	11	—	35	0	19
Per cent. of Total	100	25	11	100	54	—	100	58	—	100	5	51

T = Total number of disputes beginning during the month.
A = Number of disputes arising out of demands for an advance of wages.
R = Number of disputes arising from resistance to proposed reductions.

in 1921, when prices were collapsing at an unprecedented rate, there was a new increase in the number of strikes, the main cause of which arose on the resistance of workers to proposed reductions of wages. Throughout the entire period of price fluctuation the need for wage adjustment was, in fact, the principal source of dissension. The point of interest to note is, however, that although the need for wage adjustment remained *relatively to other factors* an equally important cause of disputes in the period of falling prices, as in the period when prices were rising, yet in the absolute sense it was less effective as a cause of actual stoppages of work during the decline. The *total* number of wage disputes during

the period of falling prices in 1921 was much less than the totals for the preceding years of rising prices. The conclusion seems justified therefore that, although rising prices and falling prices call equally for wage adjustment, the necessary adjustment is only effected with difficulty during a period of rising prices, and leads more frequently to open conflict than when prices are falling. In other words, general economic conditions are less favourable to the amicable settlement of claims during rising prices than when prices are in decline.

One element in this variation in general economic conditions must evidently be the financial strength of the contending parties. During a period of rising prices high profits are made and employment is continuously good. Consequently the financial resources both of employers and of trade unions are strong; they therefore more readily contest claims, and if necessary cease work. The reverse situation is effective when prices are falling.

Although this factor—the financial strength of the parties concerned—is probably one of the most decisive in determining the proportion of disagreements which actually culminate in stoppages of work, there are others of importance. It is generally recognised, for instance, that when industrial gains are universally great, mutual distrust between the different producing groups grows more rapidly than in a time of general distress. Whenever there is a general apparent

increase in the product of industry, each section of the community begins to look with jealous eyes upon any other section which seems to be profiting disproportionately. Thus a rise of prices, by causing an apparent sudden growth in general gain, creates an atmosphere in which the grasping spirit readily develops. The groups which are the most successful strive for still more gain; the less successful, finding themselves outdone, make strenuous efforts to reappropriate their lawful share.

The reverse effect is felt when prices fall: just as the sharing of the booty causes strife in times of boom, the need for sharing loss in periods of depression often draws the various groups together. Numerous cases have, in fact, arisen when the generosity of one hard-pressed section has made the necessary appeal, has bred a general spirit of goodwill, and laid the foundation for stable and continuous co-operation in the future.

The general conclusion to which these ideas lead is that the number of actual stoppages of work depends not only on the original causes of dispute, but to a considerable extent also upon the state of the industrial atmosphere and the economic conditions which obtain at the time when the grievances are being examined.

This consideration is of some importance for the full appreciation of the relationship between price fluctuations and trade disputes; for whereas price changes unquestionably increase the original causes

of dispute by necessitating wage adjustment, their influence may not end at that. They may have a further disturbing effect upon the general industrial atmosphere, and so hinder the amicable settlement of all claims which arise. Disputes which otherwise would have been treated around the council table may be settled instead by trial of strength. The effect of price fluctuations on *the general spirit of industry* must therefore be examined before their full meaning as a factor of discontent can be appreciated.

3. *Indirect Effects of Price Changes on Social Relations.*

It seems evident from the outset that the indirect influences of price fluctuations on industrial relations must be quite imponderable in the relative or quantitative sense. This is particularly the case, for instance, when the relationship through unemployment is being examined. If it may be accepted that the instability of prices is a cause aggravating crises of unemployment, the problem then arises: What influence do unemployment crises have on the general spirit of industrial relations? There seems little need for dwelling on this point. The mere existence of serious unemployment seems sufficient in itself to arouse a general feeling of resentment in the minds of workers. And whereas their discontent may in general be directed vaguely against the economic system itself, this feeling must inevitably be reflected

in a certain added rancour whenever direct relations are engaged with the individuals who, in their minds, immediately represent the system.

The broad psychological influence of unemployment crises may, however, be of less importance than their more lasting effect on individual sufferers. It requires little insight or imagination to appreciate that the home of the unemployed himself must be a most prolific breeding-ground of militant unrest. Assuming that the unemployed retains his human zeal and natural ambition, it seems inevitable that the continuous process of repression which he undergoes must be generating the forces of ultimate violence. The hardship due to loss of work and sustenance counts for much, but the wound to pride is one which, for some, can never heal. The slur of being unwanted, discarded as industrial waste, scorned by some, discounted a little by all, and—the keenest cut of all—reckoned unfit to support a home, strikes deep and leaves an indelible impression on those who class themselves as men. It is always, unfortunately, the best who become most embittered. And one embittered man, if he be of strong personality, can spread infection, transmitting to others his own admissible resentment, and scattering the seeds of general discontent.[1]

[1] It is essentially the youth of the nation one has in mind when considering these more personal aspects of unemployment. The brunt of the recent unemployment crisis has been borne more particularly by workers aged 18 to 25 who, lacking in experience though not in spirit, have been compelled for months, and sometimes years at a time, to remain inactive.

It is true that no policy of price stabilisation, however perfectly developed, could eliminate unemployment altogether. What is important, however, is that the general slump, with its long periods of unemployment for large numbers, should be avoided. If unemployment could be kept permanently below 5 per cent., there would be sufficient work to ensure that all men could find occupation at least spasmodically; and the proportion of really keen workers forced to remain idle would remain relatively small. From the point of view of the industrial "atmosphere," it is unquestionably the wide fluctuation in employment which is the most disastrous.

4. *Development of Measures of Conciliation.*

The need for securing the maximum of stability both of the price level and of employment, becomes still more evident as one penetrates into the inner working of conciliation machinery. A detailed examination of the tasks confronting joint industrial councils, works committees, welfare departments and other organs of conciliation would show that the progress of their work must inevitably be held up for as long as there is any general change occurring in industry. For, with any important economic change, such as that accompanying a wide fluctuation of the price level, the whole basis of collective agreements is frequently shaken, and there is a continual necessity for beginning again, building on

entirely new foundations. In the sphere of wages, sliding scale agreements frequently collapse, piece rates need revising, and the general basis for bonuses and premiums must be shifted to a new agreed position. In the sphere of labour management, agreements relating to the engagement or discharge of workers break down before the necessity, at one period, of taking any man at any price and, at another, of thrusting out employees indiscriminately in batches.

Economic disturbances of a general character, such as those accompanying price fluctuations, may thus be considered to set back the progress of conciliation through upsetting the basis of agreements previously established, and entailing a new beginning on difficult and uncertain ground. But during the whole of the process of rebuilding, those responsible for fostering a healthy spirit in industry are losing ground in another respect. They are so fully occupied for the time with the broader problems that they cannot get to grips with the real task—that of treating all questions on an individual basis and developing the right spirit through the personal or human element. In all periods of general change, the labour problem becomes a general and impersonal one. The man becomes a mere unit of industrial machinery. He is dealt with in groups. The group problem is so great that separate individual interests cannot be considered. Yet it is just this task of developing amongst workers the feeling that they are being

employed as individuals, and that their rights are individual, which represents the ultimate purpose of conciliation. Without such a feeling it is impossible to create the right atmosphere or the true co-operative spirit; and if the atmosphere is wrong, whenever disputes occur they lead to settlement through trial of strength rather than through peaceful means.

To summarise, the general relationship between price instability and industrial relations may be stated as follows. An upward movement of the price level causes a corresponding change in the cost of living, and leads to demands by the workers for the readjustment of their wages. A fall of prices similarly produces a demand on the part of employers that wages should be reduced in conformity. These are the direct and immediate effects of price changes, but they are not necessarily reflected at all times in a corresponding increase in the number of stoppages of work. The extent to which causes of friction actually develop into strikes and lock-outs depends not only on the initial cause, but also on the industrial atmosphere in which the causes of dispute are examined.

Thus a second and equally important way in which price instability affects the number of strikes and lock-outs is through their influence on the general spirit pervading industrial relations. This spirit may be affected by price fluctuations, both through their intensifying crisis of unemployment, and through

their destroying the efforts of conciliators to build permanent bases of agreement and to deal with their problem on a human or personal basis.

The full and final incidence of a change in the price level can never be known. Its direct effects can perhaps be roughly estimated with the aid of statistics; but its ulterior consequences are quite imponderable. Nevertheless, it would seem justifiable to conclude, on the basis of theoretical reasoning alone, that the essential pre-requisite of success for the development of a true spirit of industrial harmony is a maximum of stability in all conditions surrounding a worker's life. Stability of employment and stability of living expenses are the outstanding requirements. Such stability should refer, not only to the current situation, but should be assured as far as possible into the future. The more continuous and precise the system of stabilisation can be made, the more fully will it satisfy the requirements of the progressive development of conciliation.

5. *The Evidence of Statistics.*[1]

In the earlier part of this chapter a distinction has been made between the direct effects of price fluctuations and industrial disputes, and their indirect effects. The indirect influence of price fluctuations, through unemployment and through the checking

[1] I am indebted to the International Labour Office for enabling me to secure the statistical information quoted here.

of the process of conciliation, is widely diffused over time. Since this indirect influence, which affects more particularly the industrial spirit or atmosphere, spreads out its effects over long periods, its incidence cannot be clearly reflected in statistics of disputes. Little more can be expected from an examination of the figures than certain evidence relating to the direct effects of price fluctuations. One might anticipate, for instance, a broad corroboration of the belief that a rise in the price level and the cost of living increases the number of disputes due to demands for higher wages, and that a falling level adds to the number of disputes arising out of proposed reductions of wages. There is, in fact, little difficulty in finding support for this contention. Some evidence has already been given from the post-war statistics of Great Britain, which indicate that there was an unprecedented swelling of wage disputes during the years of violently fluctuating prices—1919 to 1921. The figures given by other countries are in many cases even more conclusive of the disturbing influence of rapid price changes.

In Canada, whereas the highest record of disputes before the war [1] was 150 (1912), the figures rose to 298 and 285 in 1919 and 1920 respectively; and whereas the proportion of disputes due to wage disagreements of all kinds was approximately 60 per cent. for

[1] Unless otherwise stated, "the period before the war" implies the years 1901–1913 only.

the five pre-war years 1906 to 1910, the percentages rose to 75 in 1919 and 72 in 1920. In 1923, when the price level was again relatively stable, the proportion of disputes due to wage disagreements fell to 50 per cent.

In Belgium, the highest total of strikes before the war was 221 in 1907. The totals for 1919 and 1920 were 366 and 506. The proportion of conflicts due to dissatisfaction with wages during the 15 years 1896 to 1910 averaged 55 per cent.; in 1919 the proportion due to this cause was 78 per cent.; in 1920, 74 per cent.

In France, the largest pre-war total of strikes was 1,502 in 1910. In 1919, the number recorded was 2,026, and in 1920 the total was 1,832. The percentage of strikes due to the demand for an increase of wages was approximately 58 for the ten years 1900 to 1909; in 1919 and 1920 the percentages due to this cause were 88 and 86 respectively.

All the statistical evidence available supports the belief that in a period of rapidly fluctuating prices, such as that experienced in 1919 and 1920, there must inevitably occur a vast swelling in the number of trade disputes, and that this increase must be due in large part to the need for readjusting wages.

Before the war, price fluctuations were of relatively minor extent. Their influence upon the record of industrial disputes is nevertheless evident as a broad and almost world-wide movement. It will be re-

membered that an abrupt rise of prices occurred in 1906 in almost all countries effectively applying the gold standard. This movement culminated in the trade boom and crisis of 1907, and was followed by a swift decline in 1908. This period, 1906–1908, was marked in almost all countries by an appreciable increase in the number of disputes recorded. The annual totals given in Austria and Germany for 1906 were the maximum for the pre-war part of the century. The totals for 1907 in Belgium and Italy were similar maxima. In Canada and Great Britain, the figures for 1907 were the highest for the period 1902–1910. In Denmark the years 1906, 1907 and 1908 each showed higher totals than any pre-war years outside that period.

A further international price movement of some importance occurred from 1909 to 1913, when there was a very gradual but almost continuous upward movement of the price level. During this period a fairly general increase in the number of industrial disputes was distinguishable, but owing to the very gradual character of the price movement, its effects are less clearly marked.

The principal object of examining statistics of industrial disputes is not merely to secure corroboration for the general belief that price fluctuations lead to industrial dissension, but if possible to throw light on the practical problem of determining what nature of monetary or price policy will most favour the

preservation of harmony. This, in fact, is the essential purpose of the present study: to determine whether from the point of view of industrial relations it would be desirable, not only to restrain the abrupt fluctuation of the price level associated with the boom and crisis of a trade cycle, but also to go beyond that stage and endeavour to diminish the long-period displacement of prices and the cost of living. In order to form an opinion on this point, the British pre-war statistics of disputes might be examined in greater detail.

Prices and Disputes in Great Britain, 1900–1922.

Year.	Prices.[1]	Disputes.[2]	Year.
1900	75	648	1900
1901	70	642	1901
1902	69	442	1902
1903	69	387	1903
1904	70	354	1904
1905	72	358	1905
1906	77	486	1906
1907	80	601	1907
1908	73	382	1908
1909	74	422	1909
1910	78	521	1910
1911	80	872	1911
1912	85	834	1912
1913	85	1,459	1913
1914	85	972	1914
1915	108	672	1915
1916	136	532	1916
1917	175	730	1917
1918	192	1,165	1918
1919	206	1,352	1919
1920	251	1,607	1920
1921	155	763	1921
1922	131	576	1922

[1] Sauerbeck.

[2] Total strikes and lock-outs commencing during the year. *The Labour Gazette.*

It is to be seen from the above figures that the period of trade boom and crisis about the year 1907 was accompanied by a pronounced increase in the number of trade disputes. This increase was, however, of minor importance compared with the bigger swelling movement from 1911 to 1913—a period which followed a gradual rise of some 10 per cent. in the price level and the cost of living. From this it would seem at the outset that a long-period movement in the level of prices—no matter how gradual—is equally detrimental to industrial relations as the more brusque movement associated with the trade cycle. The examination of the causes of disputes during the years 1907 and 1913 gives still greater confirmation to this view.

Wage Disputes in Great Britain, 1902–1904, 1907 and 1913.

Year.	Percentage of strikes due to		Annual total due to all causes.
	Demands for increased wages.	Resistance to reduction of wages.	
1902	24	21	442
1903	28	17	387
1904	19	24	354
1907	33	7	601
1913	53	—	1,459

It is to be seen for instance that, as a result of the rise of prices in 1907, the proportion of disputes due to demands for increased wages rose considerably; but this increase was offset by a corresponding decline in the proportion of strikes against wage reductions.

The total result was that the need for wage adjustment was of no greater importance in 1907 *relatively to other causes of disputes* than it was in the previous more stable period, 1902–1904. The same cannot be said of 1913. As already noted, this year came at the end of a long-period rise in the price level, producing a more permanent increase in the cost of living. The number of strikes in 1911 and 1912 was unusually high; but it is evident that it was only in 1913 that the full significance of the change in the cost of living was being felt. Until then the creeping up of living expenses had been sufficiently stealthy to escape serious attention. In 1913, however, a total of disputes was recorded far exceeding previous annual figures; and of this total more than half were due to demands for higher wages. Thus the evidence both of theory and of statistics would seem to corroborate a generalisation to the effect that it is not only the rapid short-period price fluctuation associated with the trade cycle, such as that of 1907, which must be prevented, but that the long-period more gradual movement, such as that experienced in the years before 1913, must be eliminated in order to preclude the possibility of a general outburst of disputes. It seems evident, in fact, that a rise in the cost of living, however gradual, must inevitably lead sooner or later, if the change is of a lasting character, to the demand for wage adjustment. Dissension will then continue until the process of readjustment is complete.

This is perhaps the main argument affecting the decision as to which of the two price stabilisation systems—the " composite " system or the " constant price-normal " system—would prove the more satisfactory from the point of view of industrial peace. On the foregoing basis, the conclusion would seem justified that only the " constant price-normal " system can give complete satisfaction, in that it is the only system which will prevent the long-period displacement of prices and of the cost of living. The " composite " system, it will be remembered, is concerned alone with the current movement of prices.

Such a conclusion, therefore, strongly reinforces that arising out of the first part of this section, namely that the system of stabilisation should be such as to prevent any fundamental change in the conditions which form the basis of industrial contracts. The maximum of stability should be imparted to the general economic basis in order that those who construct labour agreements may not have their foundations swept from under them, and have to start again. The " composite " system would fail to satisfy this essential test. In the first place, it would permit somewhat wider fluctuations of trade. Secondly, such security as it offers would not be lasting. At any moment the price position may have worked so far away from the original basis as to entail a general readjustment in all the spheres affected. Old problems then become new problems. The conflict

begins again on old battlefields with the same arguments, the same bitterness, and renewed strength.

The essential condition—long-period stability, the kind of stability which can be relied upon not merely for the current months but for several years into the future—can only be produced by means of a system which entails the maintenance of a recognised "normal" level of prices. In consequence, one may justly conclude that in so far as the preservation of amicable relations in industry may be regarded as a desirable aim, the "constant price-normal" system should be given preference over the looser "composite" system.

CHAPTER VI

INTERNATIONAL CONSIDERATIONS

PRICE policy may be regarded as an international question from two points of view. In the first place, under any monetary system whatsoever, the price movements of one country affect and are affected by conditions in other countries. Secondly, international debts are invariably expressed in the currency of some country and in consequence these debts vary in value as the value of the currency varies; that is, they vary inversely as the movement of the price level in the country issuing the currency.

1. *The Monetary Link between Countries.*

The manner in which the first of these international links between price movements operates may be shown by the following line of approach. Any complete international monetary standard, whether it be the Gold Standard, the Gold Exchange Standard or the Non-metallic Exchange Standard,[1] must contain, as an essential feature for the general cohesion of the whole system, the stabilisation of exchange rates between countries. Unless exchanges are

[1] For a description and comparison of these Standards, see *Appendix II.*

stabilised on a very general basis, the international system must inevitably be loosely knit, and to some extent unreliable. Let it be assumed, then, for the starting point of the argument, that exchange stabilisation will be a feature of whatever monetary system may be adopted in the future.

In all instances when one country stabilises its exchange rate with another it thereby automatically binds itself to approximately the same price policy as the other. Thus, whatever system may be adopted in the future, the price movements of the dependent countries will be largely determined by the price policies of the central countries whose currencies are adopted as a basis for exchange stabilisation.

This uniformity of price movement between countries which have secured exchange stability with each other is, in fact, a direct corollary of the purchasing power parity theory of exchange rates. This theory states that the value of a currency on foreign money markets depends ultimately on its value as a means of purchasing goods in the country in which it is issued. If prices in that country rise, then the value of its currency as a means of purchasing goods falls and so the exchange rate of the currency on foreign money markets tends to fall; for the foreign importer will only be prepared to pay for the currency the value which that currency represents in goods which he can import from the country.

It follows that the exchange rate between any two

currencies depends ultimately on their relative value as a means of purchasing goods exportable from their respective countries of issue. This, in turn, depends largely on the general level of prices in the countries of issue. Consequently, one essential condition for the maintenance of exchange stability between any two countries is that their price levels should follow an approximately uniform course.

This welding together of the price levels of two countries through the stabilisation of the exchange rate between them might be illustrated from the actual mechanism employed for securing exchange stability. In pre-war days the mechanism was more or less automatic, exchange rates having been restrained within narrow limits by the operation of the gold standard. A rise of prices occurring in any country caused that country to become a good market for the foreign exporter and increased the costs of the home exporter. Consequently imports tended to exceed exports. The country as a whole was then faced with the need for paying for the balance of imports. This created an additional demand for foreign currency. The value of the foreign currency rose on the exchanges to such a point that it became cheaper to export gold than to buy the foreign currency. When gold was exported it caused a drain on the reserve of banks. The banks were thereby compelled to restrict their loans to the business community. This had the effect of restraining the rise of prices which had

initially caused the train of consequences leading to the loss of gold. By bringing prices once more into harmony with the world level, the banks were thus able to restore the general state of equilibrium. The operation of the gold standard had thus, automatically, the effect of rendering fairly uniform the price movements of all countries adopting the standard in complete form.

Without the gold standard the stabilisation of exchange rates entails the introduction of artificial machinery. If, for instance, any country, say Norway, were to decide to stabilise its currency, the Kroner, in relation to, say, sterling, its first step would be to set up a stabilising fund composed of sterling bills and other exchange instruments which could be easily realised on the British and home money markets. If a rise of Norwegian prices took place, affecting the exports of that country, the foreign importer would not be willing to pay the higher price for Norwegian exports unless he could buy Kroner more cheaply. The value of the Kroner on foreign money markets would therefore fall.

This movement of decline could be stemmed for a time by the sale of bills from the sterling fund, but only at the expense of the gradual dwindling of the fund. So long as Norwegian prices remained high relatively to prices in Great Britain, the exchange rate would tend to fall below the original limit chosen. In order to restore the situation permanently and

prevent the whole of the stabilising fund from becoming exhausted, it would be necessary to bring down the Norwegian price level by restricting credit. This might be effected either by raising the rate of discount or by restraining the expansion of credit by some other general means. The chief point which it is desired to emphasise here is, however, that the actual process of securing stability of the exchange rate entails the regulation of credit in such a way that the price level of the dependent country is kept in harmony with that of the central country.

Thus illustrated, the original statement may be repeated that whatever may be the monetary system adopted in the future, whether metallic or non-metallic, the price movement of a large number of countries will be dependent, through the fixation of their exchange rates, on the price policy of the more powerful. The question of price policy is therefore, in this respect, essentially international.

It seems possible that the recognition of this point of view, coupled with other considerations, may ultimately lead to an international conference on the question of monetary policy. If such a conference does actually take place, the smaller countries will presumably be anxious to learn the nature of the price policy which is to be adopted by the more powerful, since that policy will materially affect their own conditions. They would probably be more assured by a fairly definite statement of intention

regarding price policy than by something quite vague.

How, then, could such a demand for precision be satisfied? It has been suggested in earlier chapters that the clearest definition could be given to the system of stabilisation by the introduction of the recognised " normal " level of prices. Without such a recognised " normal," the system becomes quite discretionary and somewhat uncertain. Moreover, it is discretionary in the hands of a very limited number of central institutions, whose actions might possibly be affected more by national than international considerations. The " composite " system would be of such a nature. It would entail the large majority of smaller States placing themselves unreservedly in the hands of two or three of the more powerful. But immediately there is introduced the conception of a constant " normal " level of prices into the system, the feeling of insecurity must disappear. For although the system would still be discretionary in the detailed administration of credit in each country, there would always be the assurance that the price level would not be permitted to diverge widely from its existing position. The value of money would remain constant for long periods of time, and a high measure of security would be offered to all countries affiliated to the system. Thus from the point of view of giving general satisfaction and allaying doubts, the adoption of some clearly defined system such as the " constant

price-normal" system would seem most beneficial. It would form an excellent basis for international agreement.

But there is a further reason for its adoption in preference to the looser "composite" system. Under the latter, wider fluctuations of the price level would be possible. And although such fluctuations might be relatively innocuous when they affect one country alone, they might be much more serious in their international effects. For instance, during 1923 and 1924 many countries in Europe were endeavouring either to resume the gold standard or to stabilise their exchange rates with the United States. Those which were successful must have been influenced to a certain extent by the price decline which occurred in America from the spring of 1923 to the summer of 1924. (Note, for instance, the uniformity of movement between the Swedish and American price level during this period and the continuous appeal of Swedish economists that the American price level might be allowed to rise slightly to ease the task of gold resumption in Europe.) The tendency to decline thus came at a time when many European countries, suffering seriously after long periods of depression, would have benefited from a slight upward swing of the price level. Such a movement was, however, almost impossible for any country which had linked its monetary policy strictly to that of the United States. Thus, the fall of prices was by no means limited in its

influence to America, but must inevitably have spread some of its disadvantages to other countries.

This decline of prices during the period under discussion was doubtless difficult to avoid, since the policy of stabilisation was still in an experimental stage. There nevertheless seems reason to believe that, to the extent that it may prove possible in the future to minimise price fluctuations, the benefits which will accrue from the international standpoint will be equally as great as, if not greater than, the purely national gain. For when prices universally show any serious width of fluctuation, one country may be very adversely affected by being compelled to follow a general movement at a particularly inopportune time. With the more stable regime such as would obtain under the "constant price-normal" system there is little or no danger of any country being seriously disfavoured by the general situation which, at the worst, could only be neutral.

Reducing the argument to general terms, it may be said that nations are probably more closely knit through their monetary relations than through any other form of mutual influence. The monetary bond is mechanical and almost automatic; and for that reason it frequently passes unobserved. Yet inasmuch as the industrial fortunes of any country are intimately bound up with its monetary policy, it cannot reasonably afford to remain passive when a world-wide policy is being determined. It is in the

interest of every country to express its own wishes in regard to the policy to be followed and to secure the clearest possible definition of that policy.

There are, perhaps, few countries which have fully realised their international dependence in this matter. But when the representatives of different nations do ultimately begin to appreciate the significance of their international relationships in monetary questions, and accordingly insist on international agreement in the matter, there seems but one solution which can secure unanimous approval. That solution will be the one which makes for clearest definition and which favours all in general though none more than others, namely, maximum price stability with a definite recognised position or " normal " on which to stabilise.

2. *Price Changes and the Real Value of International Debts.*

Taking next into consideration the second aspect of the problem, that of the relation between price movements and international debts, it will be seen that there is here a further important reason for considering the question of price policy to be international. For, whenever one country contracts a debt in terms of the currency of another country, the debtor country places itself entirely in the hands of the other country as regards the ultimate real value of the debt.

Great Britain's debt to America, for instance, is expressed in dollars. From this it follows that were

the United States arbitrarily to increase the value of the dollar by pressing down their price level, the burden of Britain's debt to the States would be proportionately increased.

Certain other international debts are expressed in terms of gold. For instance, the reparation payments to be made by Germany are expressed for the most part in gold marks. The value of such debts thus depends upon the value of gold which, in turn, is determined by price movements in gold-using countries. The industrial preponderance of the United States amongst the countries at present using gold is so great that the price policy of that country affects the value of gold universally. If prices fall in America, the value of the dollar, and therefore of gold, as a means of purchasing goods, rises. From this follows the somewhat extraordinary result that the movement of prices in America, by affecting the value of gold, determines the real burden of indebtedness between Germany and the countries receiving reparations.

Since it usually happens that, in any negotiations for the settlement of international debts, the currency selected as the basis for evaluating the debt is that of a country in which price stability is most assured, there is comparatively little likelihood of serious injustice being wrought in the case of international obligations between two Governments. The same cannot be said, however, of international obligations between the Government of one country and private

individuals in others; for private investors cannot stipulate the conditions of their loans. A Government, when it lends money to another, takes the precaution to make its loan in terms of a stable currency. A private investor, on the other hand, is unable to protect himself in this way, and by lending his money in terms of the currency of the borrowing Government, places his investment unreservedly in its hands. The number of Governments which have abused this confidence by reducing or even wiping out completely their obligations to foreign investors through currency inflation, is incredibly large. This method of wholesale international robbery is the worse in that it is effected in an insidious, irresistible manner and leaves the victims without remedy whatsoever.

It is true that a means has now been devised for eliminating this injustice to some extent. International loans such as those floated under the auspices of the League of Nations, or by special treaty between Governments, for private subscription, are, by agreement, expressed in terms either of gold or of a stable currency. In consequence, the investor is now reasonably secure so long as the stable currencies selected as basis for international loans remain stable. Nevertheless, it is only a limited group of investors who are protected in this way, and there is still considerable opportunity for the abuse to continue.

To reduce the argument once more to general terms, it is to be seen that there is here a second aspect under

which the question of price policy is international. All international debts are expressed virtually in terms of a given currency. The real value of those debts thus depends upon the real value of the currency in question. What is required for justice to be done between one country and another is therefore a currency the stability of which is permanently assured; the stability should relate not merely to short periods but to long periods of time, in order to give complete satisfaction.

Such a currency can only be produced in a country in which the system of price stabilisation relates to long-period changes. This is not possible unless there be introduced into the system the conception of a recognised " normal " price level to be maintained over long periods of time.

The conclusion reached here thus reinforces that of the earlier part of this section, namely, that when the question of price policy is placed on an international footing, the only policy which will be capable of giving general satisfaction will be that which, on the one hand, is capable of clear definition and, on the other, will eliminate the long-period fluctuation of prices. The system which most nearly satisfies these requirements is the " constant price-normal " system defined above. Any system more vague than this would leave room for doubts and international mistrust, and would seem valueless as a basis for securing unanimous agreement.

CHAPTER VII

THE GENOA PROPOSALS FOR A GOLD EXCHANGE STANDARD

WHILST setting forth certain new principles of a positive character for the guidance of monetary policy, the Genoa resolutions for the institution of a gold exchange standard are essentially preventive in their purpose. They aim at obviating the catastrophic consequences of the possible uncontrolled resumption of the gold standard. Their chief inspiration was, in the first place, the belief that there would sooner or later be a general movement for the restoration of the gold standard, and, secondly, the fear that if the resumption were to take place on a pre-war scale, and in accordance with pre-war principles, the results would be disastrous. In order to appreciate this point of view, it might be well first to examine what actually were the principles in operation before the war, and then consider their application to the present altered circumstances.

1. *The Pre-war Gold Standard.*

Under the gold standard the one outstanding criterion which banks followed in their regulation of

credit was the gold reserve situation. In certain countries the ratio of gold reserve to deposit liabilities was determined by law; in other countries it was established, within elastic limits, by custom. In all instances banks were obliged to protect their reserve ratio and could never allow it to fall much below a given position lest they should destroy the confidence of the public. As a result, whenever gold reserves were beginning to dwindle, banks were compelled to restrict credit so as to limit the growth of their liabilities.

On the other hand, it was unprofitable for banks to hold gold in excess of customary requirements, and consequently, whenever a surplus was evident, they would lower their rates of discount with a view to inducing more borrowers into the market. The expansion and contraction of credit was thus dependent upon the volume of gold reserve available to support the credit.

Moreover, the influence of the gold supply affected all countries using this metal in a more or less uniform manner. Thus, whenever there occurred a shortage of gold, the deficiency of reserves made itself felt in all countries, causing a universal contraction of credit and decline of prices. For instance, during the years 1873 to 1896, when gold production failed to keep pace with the development of industry, the expansion of credit was continuously restrained and the British price level declined from 151·9 in 1873 to 88·2 in

1896.[1] The price levels of other countries followed a similar course. From 1896, after the discovery of new mines in South Africa and the introduction of new methods of ore extraction, gold production developed more rapidly than did industry, and caused a universal upward movement of the price level.

The fact of the movement of prices having affected all gold-using countries alike leads to a question of considerable importance for this study, namely, whether it would have been possible, in the circumstances existing before the war, for any one country to stand out against the general movement. Would it have been practicable, for instance, for Great Britain to disregard the surplus of gold existing at the beginning of this century and, by restricting credit, keep her own price level low? Probably not; for under the gold standard, immediately Great Britain were to force its price level below the general world level, the rate of exchange would turn in favour of this country. It would then become profitable to purchase gold in foreign countries with the appreciated sterling, and import it into this country. Gold would flow in from other centres and Britain would be saddled, not only with her own share of the world surplus, but also with that of all

[1] Wholesale Prices, Great Britain, Board of Trade (Dept. of Labour Statistics,) 47 articles, 1900 = 100.

other lands which were allowing their price levels to rise.

It would seem, therefore, that, under the gold standard, the only way to prevent a world surplus of gold from creating a general rise of prices would be either that one country should be willing, as, apparently, is the United States at present, to bear the whole of the surplus, or that there should be an agreement amongst the different countries, first, to hold their due proportion of the world's gold reserve and, secondly, to prevent their price levels from rising much above a given position. The second part of the agreement would be the more important of the two, for it would be of little value that each country should hold its due proportion of gold, if, on the basis of that proportion, all countries were simultaneously to allow credit to expand, and prices to rise. The proportionate distribution of the surplus is not of itself sufficient to prevent that surplus from providing a basis for price inflation. International collaboration of a clearly-defined character, involving the adoption of an upper limit for the fluctuation of prices, would thus have been necessary, under pre-war conditions, in order to prevent a surplus of gold reserve from leading to a rise of prices.

As far as the contrary condition of shortage is concerned, whenever there was an inadequate supply of gold before the war, this led inevitably to credit

contraction and falling prices in all gold-using countries.[1] The kind of international collaboration which would have been required in order to avoid such a result was probably of too advanced a nature to have been acceptable in pre-war days. It would have entailed the willingness on the part of a number of countries to renounce their independent use of gold and to introduce a gold exchange standard; or it would have meant economising gold by the introduction of an international clearing system. Such measures may perhaps be possible now, but they would hardly have been practicable before the war, when each nation guarded jealously its own fancied monetary independence.

The application of pre-war principles to pre-war conditions resulted, through the continuous kindly disposition of Fate, in less general dislocation than might have been expected. Under some fortunate dispensation it was decreed that, for the century preceding the war, the rate at which gold should be unearthed should coincide roughly with the increase in the rate at which other goods were produced.

[1] It is to be noted that in the above argument the possibility of modifying the gold content of the monetary unit has been disregarded. It ought to be stated that a country could at all times prevent itself from being influenced by an international price movement by effecting changes in the gold content of its monetary unit. The justification for excluding this consideration is that it would have been in conflict with the pre-war principle of maintaining the sanctity of the traditional gold content of the unit. The present part of the discussion is intended to deal exclusively with the pre-war situation.

Consequently, we were spared the extremes of inflation and deflation. There is no assurance, however, that this convenient arrangement will continue. The more cautious would probably suggest that we have tempted Providence sufficiently, and that in the future, rather than leave ourselves entirely at the mercy of fortuitous circumstance, it would be well to bring under control any parts of the monetary mechanism which are controllable. They would suggest, for instance, that the world's supply of gold should be brought under effective regulation in such a way as to serve, and not impede, the purposes of scientific control. This, in fact, is one of the chief objects of the Genoa resolutions. Before these resolutions are examined in detail, however, it might be well to show how the existing state of general post-war confusion renders doubly urgent the introduction of a system of careful regulation of monetary reserves.

2. *The Present Gold Situation.*

Some indication may be given of the existing condition of the gold supply by the table below, showing the amount of gold held by the central institutions at the end of 1923 as compared with the end of 1913.[1]

[1] Figures extracted from the *Monthly Bulletin of Statistics*, published by the League of Nations, Geneva. By showing the situation at the end of 1923, the table reveals the post-war position before steps had been taken by any European country to resume the gold standard. The situation

The outstanding feature of the present situation is that the United States, which holds more than 40 per cent. of the world's monetary supply of gold, has approximately a billion and a half dollars of gold more than is necessary to support the existing volume of credit issued in that country.

The examination of the position in other countries would seem to show that the supply of gold is fully adequate to permit the resumption of the gold standard, *provided that gold is not reissued for circulation.*

In these circumstances, so long as the restoration

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since that date has changed, though not to any marked extent up to the beginning of 1925.

GOLD RESERVES

(000,000's omitted)

Country.	End of 1913.	End of 1923.
Argentine	Pesos 243	475
Belgium	Francs 249	270
Canada [1]	Dollars 26	44
Denmark	Kroner 73	210
France	Francs 3,508	5,540 [2]
Germany	Marks 1,170	467 [2]
Japan [3]	Yen 224	1,115 [2]
Netherlands	Gulden 151	582
Norway	Kroner 44	147
Spain	Pesetas 480	2,528
Sweden	Kronor 102	272
Switzerland	Francs 170	537
United Kingdom	Pounds 35	128 [4]
United States	Dollars 241 [5]	3,080

[1] Held by chartered banks in Canada.
[2] Partly held abroad.
[3] Some silver included in the figure for 1923.
[4] Includes a small amount of silver.
[5] End of 1914.

of the gold basis is confined to a small number of countries and so long as gold is held out of circulation, there will exist a large (and probably increasing) surplus of gold available as a means of credit inflation in the gold-using countries.

This, then, represents the situation in the present and for the immediate future. The more distant future may, however, hold something considerably more threatening. The existence of the present surplus of gold depends upon the fact that this metal is not in use as circulating medium. Were it restored to circulation in all countries there would probably be serious shortage. For, assuming that the gold standard were to be introduced on exactly the same scale as before the war, and assuming also that gold production had just kept pace with the expansion of industry since 1914, there would only be sufficient gold to support the 1914 price level. On the basis of these assumptions, deflation from about 160 (or whatever higher level gold-prices may reach during the immediate process of expansion) to about 100 would be entailed for countries at present using gold.

Although, therefore, there is the appearance of a large surplus of gold at present capable of giving rise to inflation, it is possible that the situation might ultimately become one of shortage through the general resumption of the gold standard and through the restoration of gold to circulation.

3. *The Possible Effects of the Post-war Gold Situation.*

In order to gain a clearer appreciation of the possible dangers of the post-war situation, it might be well to picture it, for the moment, in the worst possible colours, assuming the application of pre-war principles unmodified and the complete absence of international co-operation. Under such fictitious circumstances, the United States, finding itself confronted with its existing surplus of gold, would maintain a low rate of discount and permit its price level to rise unimpeded. The exchange rate would turn against America and gold would tend to flow outwards. All countries which had resumed the complete gold standard, and had thereby opened their markets for the purchase of gold at a fixed price, would find themselves compelled to buy some of the surplus gold flowing in from America. For so long as the American price level stood above that of any other gold-using country, gold would tend to flow to the latter country from America. The only protection for the country receiving the gold would be to ease credit and allow its own price level to rise as rapidly as that of America.[1]

The existing world surplus of gold would be, so to speak, bandied about from country to country, everywhere causing easy credit conditions and tending

[1] This possible danger of an inflow of gold from America has been foreseen and forestalled by Sweden, whose resumption of the gold standard is only partial, the monopoly of gold import having been vested in the Central Bank which may, if necessary, revise its buying price for gold.

to force up the price level. This process might continue until prices had risen in gold-using countries from about 150 to between 180 and 200.

Let us suppose that, after this stage in the process of inflation, it were then to become more generally fashionable for countries to introduce the gold standard. Suppose, for instance, that the maintenance of the gold standard, including the restoration of gold to circulation, were again to be considered a matter of national prestige, or that it were regarded as important for all countries from the point of view of their international trade; one country after another would then enter the market for more gold. Deflation would supersede inflation, and would continue until all countries were satisfied with their monetary status. The price level would only come to rest finally when all countries were in a permanent state of contentment and when the rate of gold production itself also contrived to fit into the general scheme of stability.

Although the above outline of the possible consequences of reintroducing pre-war monetary principles represents a somewhat extreme view, it is not too much to say that were the gold reserve situation to be accepted once again by banks as their principal criterion for the control of credit, a period of inflation would in fact result; and if, following this period, the resumption of the gold standard were to become more general, there would inevitably be a period of deflation. These dangers are real and must be con-

fronted. Measures are urgently required which will assure stability in the future and will satisfactorily oppose the tendencies created by the present surplus of gold and by the future more complete resumption of the gold standard.

4. *Measures Recommended by the Genoa Conference for Obviating the Fluctuation of Prices.*

The practical problems with which the world is confronted are thus, first, that of preventing the existing surplus of gold from causing a rise of prices during the forthcoming three or four years, and, secondly, that of avoiding subsequently the excessive absorption of gold by countries wishing to resume the gold standard. In order to satisfy the former requirement, the gold situation must be definitely deposed as a criterion for the guidance of monetary policy, and in order to depose that criterion, it is necessary to have another to put into its place. The second requirement, that of preventing the excessive demand for gold, could only be effected by international agreement between the countries concerned. These two principles, the introduction of new criteria and international agreement as to the demands which may be made upon the international gold market, form the basis of the proposals made by the Genoa Economic Conference of 1922 for securing international monetary stability.

The new criterion which that Conference recom-

mended for the control of credit is that of price stability. Credit is no longer to be regulated according to the reserve situation, but according to the movements of the price level. It is stated in the Resolutions that one of the principal aims of the system will be to "prevent undue fluctuations in the purchasing power of gold"; in other words, the aim will be to prevent undue fluctuations of the price level in countries using the gold standard or the gold exchange standard.

Given, then, this new principle of securing price stability, how may it be made effective in opposition to the strong tendency for the gold situation to be taken again as chief criterion? As has already been noted, once the gold standard is restored, the gold situation will at all times compel some consideration. The maintenance of a surplus of gold is unprofitable to banks and always provides a certain incentive for them to expand credit; and a shortage of gold, if it is allowed to occur, must inevitably cause contraction. Thus, in order that the gold reserve situation may be deposed from its throne as the chief criterion for the control of credit, and supplanted by the principle of price stability, gold reserves must be carefully manipulated so that they do not interfere with the requirements of price stability. A permanent control must, in fact, be exercised over the international gold basis.

In order to achieve such a purpose, the Genoa

Conference suggests, first, that the demand for gold reserves amongst the nations should be regulated in accordance with an international agreement to be drawn up.

The danger arising from a shortage of gold is to be met, it seems, by persuading certain countries, in the interests of the whole, to refrain from resuming the gold standard, and to confine themselves to stabilising their exchange rates with one of the gold-using countries by means of "artificial" machinery, thus forming a gold exchange standard. Further economies may be effected by the introduction of an international clearing system, or by inducing certain countries to hold a portion of their gold reserves abroad.

Theoretically, the scheme seems perfect. But when examined in its practical details it raises certain doubts. In the terms of the Resolution itself, the new principle to be established is that of preventing "undue fluctuations in the purchasing power of gold." But what precise meaning can be attributed to the term "undue fluctuations"? It would seem clearly necessary at the outset to give exact definition to the object to be secured by the new mechanism. Yet this expression is almost empty of meaning as it stands. For instance, would a continuous upward movement of 3 per cent. per annum be considered "undue"? If not, in less than 10 years' time there might be a rise of prices sufficiently extensive to produce a serious shortage of gold. On a similar under-

standing, this movement might be followed subsequently by a price decline considerably worse than that experienced from 1873 to 1896.

If there were no forces battling against price stability, the question of defining clearly the new criterion would perhaps be less urgent. For instance, with the non-metallic basis, the principle of price stability, once generally approved, would hold the field with ease. However, immediately the gold basis is resumed the gold situation will at all times claim some degree of attention, and will demand at least a compromise with the principle of price stability; and the continued survival of this principle seems most improbable unless it is given the clearest definition at the outset.

Let us imagine for a moment the task of an international executive committee[1] appointed to supervise the application of the Genoa system and instructed to "prevent undue fluctuations in the purchasing power of gold." Such a committee would be confronted with a surplus of gold distributed amongst the countries. Each Central Bank, possessing more than enough reserve, would be saying to itself: "No conceivable harm can be done by a 2 per cent. or 3 per cent. rise of prices; let credit continue to expand."

[1] It does not seem certain that an executive committee is to be appointed under the Genoa scheme; the control might, for instance, be effected through a semi-official co-operation between Central Banks. The problem would nevertheless remain the same, though it seems that the task might be lightened if it were possible to appoint an executive body with sufficient advisory status.

By what criterion could the executive committee then state that such expansion was undue? It would, in fact, be powerless unless it had some precise instructions—unless, for instance, it could say: "The level of prices on 1 July, 1925, has been accepted as the recognised normal. All indices give evidence that the price level now stands above that recognised position. Any further rise would be undue."

If confronted with a shortage of gold, the task of the committee would be still more difficult. To obviate a condition of shortage it would need to be provided with arguments sufficiently powerful to persuade countries to revise their monetary organisation and to reduce their internal holding of gold reserves. There seems some justification for scepticism as to the success of such proposals even in the most favourable circumstances, but there is every assurance of their failure if the principle of price stability, the intended defence and backbone of the whole system, is itself indistinct.

To instruct a committee to protect the price level from incursions by the gold situation without giving it a line to make a defence, without establishing a recognised price level on which to stabilise, would be asking it to achieve the impossible and the unknown. The proposition would be without logic from two points of view. On the one hand, the executive would be almost defenceless; on the other, it would not know exactly what it had to do.

One is drawn to the conclusion, therefore, that the purpose of the Genoa Resolutions is rather to outline the broad principles on which monetary policy should in future be guided than to give final definition to the scheme. There is evidence in support of this in the text itself of the Resolutions, which indicate that the details of the new policy are to be elaborated by a conference of central banks convened for the purpose of drawing up an international monetary convention. If any criticism is implied in the foregoing remarks, it cannot relate therefore to the work already accomplished and the proposals made, but rather to a potential future omission or state of apathy, of which there is as yet no evidence.

The main purpose of these notes is to suggest that by once more accepting gold as the basis of the monetary system, the world will be restoring, not an inert, plastic instrument, but a powerful force capable of prejudicing the interests of society. The gold situation will tend to demand first a compromise with price stability and then, in course of time, it may establish once again complete supremacy. Its insidious power can only be withstood by resistance pre-determined and designed. And if price stability is to be upheld against the pressure of gold, then one central feature of the defence must be a clearly-defined system of price stabilisation.

Of the possible systems which might be applied, the looser " composite " system, or any other rela-

tively vague method, affords no adequate protection. The " composite " system itself is certainly too elastic in its definition to enable it to resist the insistent pressure of gold; it would crumble very soon and leave the gold situation once more in sole command. It is difficult, in fact, to imagine any system of price stabilisation capable of standing firm unless it includes the recognition of a given level as a resisting point, a " normal " position to which the price level might at all times be linked. Without the existence of a stronghold of this character, it seems doubtful whether the demand for price stability can be regarded as more than the expression of a pious hope. If this be so, the restoration of the gold standard will have this clear significance: the thread by which the principle of price stability will thereafter hang will be the acceptance or rejection of the conception of a " normal " level of prices.[1]

[1] Appendix I: " International Measures necessary under the Gold Exchange Standard to secure Price Stability " might suitably be read in conjunction with this chapter. The main burden of that appendix is to suggest that the surest method of safeguarding the policy of price stabilisation is to preserve a certain proportion of the existing surplus of gold. Although the excess of gold may constitute in some respects a burden on the banking system and act as an inducement for it to issue additional loans, nevertheless a certain excess over customary reserve requirements is necessary for the maintenance of freedom for credit control. Furthermore, the possibility of a shortage of gold holds by far the more serious risk and should at all times be kept at the safe distance.

CHAPTER VIII

THE BALANCE SHEET

In the foregoing pages, some attempt has been made to outline the broad features of the problem of industrial stabilisation. It was shown in the earlier passages that the prevention of trade depression and unemployment depended upon the possibility of discovering some factor capable of exercising a general influence over the movements of industry. Industry itself is inherently unstable. In order to restrict its fluctuations, some force, or balance wheel, must be discovered to counteract at every stage the tendency to instability. Amongst such possible means, attention was drawn to the discount rate which, by virtue of the universal nature of its spreading influence, seemed capable of producing the desired result.

Given, then, the task of stabilising industry at a high level of activity, and a means whereby this task might be to some extent accomplished, it becomes necessary to discover some index or criterion which will show how far success is being achieved. The suggestion was made that the most reliable index of industrial stability is the general level of prices.

When prices fall, this indicates that trade demand is in decline. When prices rise, this shows that demand is tending to exceed supply. So long as the price level remains stable, this is the surest evidence that demand is running parallel with supply and that both over-expansion and trade decline are being avoided. The criterion which the discount rate controllers should watch most closely is therefore the index number of prices. An upward movement of this index would be the signal for raising the rate of discount and a fall of prices would show the need for easy credit.

Certain further questions then arise: To what extent should this new criterion be followed? What degree of price stability is desired? Should the price index be employed independently of other evidences of the state of trade? In order to give a satisfactory reply to these questions, it becomes necessary to work out alternative systems of price stabilisation, and examine them in the light of different tests, with a view to determining which will give the greatest satisfaction from all social points of view.

In the foregoing notes, the conclusion was reached that only two alternative systems of price stabilisation are practicable; these have been described as the " constant price-normal " system and the " composite " system. The former system involves the introduction of a recognised " normal " level of prices, with the obligation on the part of the controlling authorities to keep the price level within reasonable range of

that position. The " composite " system is one under which there is no such link with a fixed " normal " position. The movement of the price level is judged according to its effects. Subsidiary indices are used to show when the upward movement is stimulating speculative enterprise, and when the downward movement is being accompanied by depression. The price movement would be restrained only when these subsidiary indices gave evidence of the need for change.

The " constant price-normal " gives clear definition; the " composite " system is somewhat lacking in precision. The " constant price-normal " system would restrain the fluctuations of trade within rather narrower limits than would the looser " composite " system. The " constant price-normal " system eliminates the secular, long-period fluctuation of prices; the " composite " system is concerned alone with the current trend.

In the examination of these alternative systems in the light of six different tests, the conclusions which appeared to be justified were broadly as follows. The " composite " system seems, at first sight, to be the easier of application, in that it merely requires the controlling authorities to act with due discretion at all times, in accordance with principles which are not precisely defined. The " constant price-normal " system, on the other hand, requires somewhat closer attention, and might present some difficulty, more particularly in the initial stages. There is evidence,

however, that this system could be applied without serious disturbance of the money market. It would be operated on the principle that early anticipatory action in the control of credit will avoid the necessity of more drastic action later. Moreover, once the system were recognised, the existence of an established " normal " level of prices would, by its psychological influence, materially reinforce the influence of even minor movements of the discount rate.

In the actual method of application of the system an adequate margin of discretionary power would be vested in the controlling authority to enable them to make an allowance for local or temporary disturbances and to bring the system into operation in a gradual, frictionless manner. The fear that it would prove too " rigid " in its application is therefore unfounded. The idea of rigidity is not applicable in the sense that the system would require for its operation measures of great severity. The task of preventing instability by this method of early intervention would seem to involve considerably less severity of action than would any system of procrastination or eleventh-hour action such as that in operation before the war.

As regards the second test to be applied, it was felt that little differentiation could be made between the two systems in the matter of their ability to yield a high level of consumption. The " composite " system, with its wider fluctuations of prices and consequently its wider fluctuations of stocks, might

yield a lower level of long-period consumption than the more stable system. But this disadvantage might perhaps be offset by its introducing a somewhat greater speculative stimulus into business. There seems to be some foundation for the opinion that the existence of an element of chance or risk provides an added incentive to expansion and invention. Men are gamblers at heart; and the introduction of risk imparts an added zest to production. However, a further more analytical examination of the influence of the speculative stimulus seemed to show that this factor makes little real difference to the development of invention or of economies in method and organisation, even in the most wildly fluctuating regime. Therefore, given two relatively stable systems for comparison, no serious distinction would seem possible on these lines.

It was felt justifiable to pass to the subsequent tests with the balance sheet still comparatively clear. The next problem, that of the relation between price stability and current conceptions of social justice, gave rise to difficulty in view of the obscurity surrounding the meaning of the much used, and perhaps abused, expression "social justice." However, by confining attention to what people actually mean, rather than what they ought to mean, by justice, a certain conclusion is possible. The principle expressed in the "right of property" is sufficiently widely accepted in present times to form the basis of a logical argument.

The right of property, which is recognised both at law and in public opinion, in a large majority of countries, implies that the ownership of property or goods confers the right to continue holding the same property or goods unimpaired. If any person has acquired, by approved means, a given quantity of property or goods, his ownership shall be duly protected against incursions by other individuals. This is a principle which throughout the centuries has gradually been ingrained into men's minds. It is a corner-stone of the existing legal and economic system. Whatever views each individually may hold regarding the actual ethical basis of this principle, it plays such a fundamental part in the existing social and industrial order that one may quite legitimately build a conclusion on it.

The conclusion is reached as follows. Changes in the value of money are the result of changes in the general level of prices. Thus, all holders of money, or of a title to property expressed as a fixed amount of money, find that their title to property alters with every fluctuation in the level of prices. In other words, a change in the price level deprives one section of property and transfers it to another. In order that the right of property shall not be infringed, the value of money should remain permanently unchanged.

This is an argument for the elimination not only of the rapid cyclical fluctuation of prices, but also of the long-period variation. It is consequently an

argument for the introduction of the " constant price-normal " system in preference to the floating " composite " system of price stabilisation.

A second reason adduced in favour of the " constant price-normal " system was that it fitted more logically into the existing economic order. Man, as a rational being, can only conduct his affairs satisfactorily if he has some foreknowledge of the conditions in which he will have to operate. Anything which makes for clarity and certainty in his outlook will enable him to act more logically. Prices and costs enter more than any other factor into his calculations concerning the future. If prices in general remain constant over long periods, the basis of reliable foreknowledge is materially widened, and will assist the rational organisation of economic activity. It was felt, then, that one might justly pass from this test with a certain bias in favour of the " constant price-normal " system.

The fourth test, the object of which was to determine the influence of the alternative systems of price stabilisation on the cost of living, real wages and industrial disputes, gave a further conclusion in favour of eliminating the long-period fluctuation of prices. Clear evidence exists to show that it is not only the rapid short-period fluctuation of prices associated with the cyclical boom and slump that causes an outburst of disputes, but that the slower long-period movement is equally provocative of dissension. The gradual,

insidious rise in the cost of living, which accompanies a progressive upward trend of prices such as that experienced from 1909 to 1913, is bound to lead ultimately to a general upheaval due to dissatisfaction with existing rates of wages. In order to avoid this cause of disputes, it is necessary, therefore, to eliminate the long-period or secular movement of prices. This can be effected by the introduction of a recognised "normal" into the system of price stabilisation, as would be done in the case of the "constant price-normal" system.

The "composite" system, on the other hand, is unsatisfactory, partly because it is not concerned with the long-period trend of prices, and partly because it permits a greater width of fluctuation in certain conditions which affect the worker's life and thereby the general progress of conciliation. Under this looser system the continuity of employment is less assured. And the price basis, upon which all wage contracts rest, may at any moment be found to have worked so far away from its original position as to entail a completely new beginning in setting up agreements as to wages, benefits, bonuses and all conditions expressed in terms of money. The element of long-period fixity, the essential condition for the unchequered development of conciliation, is absent.

The need for introducing a system which will eliminate the long-period fluctuation of prices thus finds support both on the grounds of its fitting most

logically into the existing economic order, and by virtue of its throwing down one outstanding barrier to the development of social harmony. These reasons are fundamental. They spring from basic principles. Nevertheless, their acceptance might be long delayed if they were not reinforced by certain arguments of expediency. Long-period stabilisation of prices is desirable in itself. But, in point of fact, it provides the only means of securing stability of prices at all by any conscious process. It is true that, given absolute freedom of credit policy, such as might be possible under a non-metallic system, a comparatively vague method of price stabilisation, such as that involved in the " composite " system, might continue permanently in operation. But, when confronted with a dynamic force, the gold standard, no system can withstand the continuous pressure unless it is itself based on precise and solid principles. The " composite " system would crumble sooner or later, once the gold standard became generally operative again.

Those who wish for price stability in any form, must ultimately be driven towards the one solution. To procure what they want and to defend it from attack, they must explain exactly what they want. And in order to give any really precise meaning to price stability, they must introduce the idea of a fixed position on which to stabilise. In other words, they must introduce the conception of a " normal."

Moreover, regarding the problem from the point of view of the executive authorities themselves, in the event of the central banks also concurring in the desire for price stability, it will be quite beyond their power to secure stability unless they themselves have some clear idea of what they are about. They, as the executive power, must have in their minds some fairly precise conception of the aim in view before they can consciously attain it. Inwardly and mentally, at least, they must regard some given level of prices as being more or less normal. Given the mere idea of a normal position, however loosely conceived or established, a certain element of strength and stability can be given to the policy; but with no suggestion whatever of a fixed or recognised position, stability cannot be maintained so long as there are forces opposing it.

The final step in the argument, then, is this. Let it be assumed that the principle of price stability is accepted; that there is a definite decision for its adoption as the main criterion for the guidance of future monetary policy; and that in order to give this criterion clear definition and enable it to be made effective, the executive authorities must have in their minds a "normal" level of prices. The problem then remains: should the executive make known to the general public what is the normal which they have in mind? Should the normal be recognised openly, or should it be kept under cover merely for the use of

the Central Banks and others trying to make it effective?

This particular problem is perhaps, of all, the most crucial. It would be raised as the essential issue, for instance, at a Conference of Central Banks such as that recommended at Genoa. If such a conference were to take place, would the Central Banks be prepared to broadcast their intention to adhere as closely as possible to a given normal?

There arises, at the outset, one serious objection to such a procedure. It might be considered impossible, particularly in the early stages of stabilisation, to make the normal sufficiently effective in practice. Assuming that such a doubt were justifiable, the banks, having set themselves a certain task, would feel in danger of failing in its complete accomplishment, and consequently of incurring some criticism and losing a measure of their high repute. Although this must inevitably appeal as a strong argument to those directly concerned, one feels that perhaps it expresses a somewhat over-cautious attitude. In the first place, the maintenance of a given normal would represent a self-imposed obligation; and failure would simply mean that the ideal had been too high. Criticism under such conditions would clearly be unjust and would therefore not merit consideration. In the second place, although the normal is fixed, the limits of permissible fluctuation from that normal would initially be experimental and entirely at the

discretion of the banks themselves. Thus, even with the normal fixed, the banks are still their own task-masters, and are therefore their own judges. Finally, the normal itself might even be regarded initially as provisional. It might be given a limited lease of life and be subject to possible subsequent revision. If the new policy were thus introduced on an experimental footing first, then all sections would be content and the extremes of caution satisfied.

There remains a wealth of argument showing the expediency from other points of view of openly recognising a normal price level. Regardless of the fundamental reasons touched upon above, the fixing of a normal gives the clearest possible assurance that the policy approved is to be sedulously applied. No international doubts can then arise; the real burden of international debts becomes fixed; the price policy is clearly known and is one to which all nations can subscribe since their several interests are equally safeguarded.

Finally, the introduction of a normal, by imparting clarity and definition, will give the maximum of satisfaction to a vast and growing movement for monetary stability. Spasmodic attempts before the war have probably given this movement its true economic foundation. But it is the more recent period of violent price inflation and subsequent collapse which has seized the public imagination and inspired renewed attempts to set stability of prices foremost as

the aim of monetary reform. The Brussels Conference first, in 1920, threw out warnings that the policies of inflation and deflation would prove disastrous. Their lesson was well illustrated by subsequent events. The Genoa financial experts again declared the essential requisite for the economic reconstruction of Europe to be the achievement by each country of stability in the value of its currency. Later, the Financial Committee of the League of Nations endorsed this declaration and gave it certain practical effect in the reconstruction of different parts of Central Europe. In 1924, the International Labour Office expressed the view that stability of prices should constitute the first objective in any programme for preventing unemployment. The International Associations on Unemployment and Labour Legislation, in joint Conference at Prague in 1924, urged that Governments should promote the application of the Genoa scheme for securing stability of prices.

The decisions of these different international organisations, with their roots in numerous national centres, are reinforced by a gradual development of public sentiment in almost every country. The movement swells, finding few opponents, and drawing many of its most eminent protagonists from the ranks of bankers and financiers themselves. What, then, will be the ultimate result?

The danger one foresees is one which cannot be truly estimated, since it is impossible as yet to penetrate

into the minds of those with whom the decision will ultimately rest. But there is just a possibility that the whole movement for price stability will be foiled, either because those who press vaguely for this policy cannot state precisely what they want, or because the authorities in whom control is vested are hesitant and unwilling to express in clear and open terms the object of their future action.

These weaknesses are obvious and simple. So simple, in fact, that they have almost passed unnoticed. They seem worthy of more close attention. Some real meaning must be found for monetary stability and a meaning which can be approved by all.

The foregoing notes have drawn their main inspiration from the labour point of view. It is felt, however, that this bias has not led to conclusions incompatible with the general interest; for although the motive of the study may have arisen from an attitude which is not entirely impartial, it is hoped that the treatment of the subject has not failed to give due weight to any point of essential concern to any group. However that may be, it is urgent that the question of defining price stability should be given more general attention. We are on the eve of important decisions with regard to monetary policy. Before such decisions are actually taken it would seem desirable that a consensus of opinion, representative of every interest, should be formed concerning the precise meaning to be given to price stability.

APPENDIX I

International Measures Necessary under the Gold Exchange Standard to Secure Price Stability

The international measures necessary to maintain stability of prices under the gold exchange standard have been outlined by the Genoa Economic Conference of 1922. This Conference indicated in the first place that the regulation of prices might be effected by the control of credit, granted that there were co-operation among Central Banks. In the second place, price stabilisation through the control of credit can only be effected provided that credit policy is freed from interference by the gold situation; thus a second condition for price stability is that the gold basis should be adapted to the needs of the credit policy. The adaptation of the gold basis would again entail international agreement and co-operation.

These general proposals immediately raise various practical problems of importance. For instance, what precisely may be the nature of the international agreement for ensuring that the gold situation will be adjusted to the needs of credit policy? Again

assuming that interference by the gold situation has been successfully prevented, what exactly does "co-operation by Central Banks in controlling credit" mean? What are the actual measures inferred? It is with such practical aspects of the problem of international control that the present notes are more particularly concerned.

One method of approach to the problem is as follows. In order that price stability may be preserved, the first point of importance is to secure absolute freedom of credit control. Such freedom has existed for the last three years in the United States, and during that period there have been unprecedented advances in the policy and technique of credit control. The reason for such developments has rested in the fact that policy has been quite independent of such mechanical factors as the gold situation. For there has been at all times a surplus of gold. Similarly, if freedom of credit policy is required for the purpose of maintaining price stability the same condition must be secured: there must be permanently a certain surplus of gold in those countries which are to be responsible for maintaining stability of prices.

Thus the aim of all future measures for the regulation of the gold basis so that it may not interfere with price policy should be the maintenance of a certain surplus of gold. If measures of international co-operation fail in this, they fail in the essential point, for as soon as the gold reserve ratio begins to

approach its recognised minimum it becomes the sole determinant of credit policy, and consequently the chief determinant of price movements.

The problem of maintaining permanently a surplus of gold is fairly simple theoretically. The amount of surplus gold is the difference between its supply and the demand for it; and in order to preserve a surplus it is merely necessary that demand should be restrained below the given supply. It has long been recognised that the supply of gold itself could not without the greatest difficulty be subjected to regulation. Consequently the only regulation possible is on the side of demand.

The demand for gold depends chiefly upon: (1) the nature of the various monetary systems of the world; (2) the level of prices.

The first of these conditions is perhaps of the most immediate importance. Under an international gold exchange standard there are four possible kinds of national monetary systems, each differing in the amount of gold required for its support. There is, first, a system based internally on paper alone, but linked to a gold currency such as the dollar by some method of exchange stabilisation so as to form a gold exchange standard. Such a standard, though based indirectly on gold, could be maintained without any internal holding whatever of this metal. However, a small internal balance of gold might conceivably be regarded as of some importance in that, no matter

what happened to the value of other assets held, there would always remain one asset of stable international value. Here, then, are two possible systems closely allied, each constituting a form of the gold exchange standard, but one requiring a small internal balance of gold and the other none at all.

Then there is the gold standard proper. A perfectly efficient gold standard can be formed without either gold circulation or even gold coinage. It is sufficient for the Central Bank to fix a definite selling and buying price for gold and for export and import to be unrestricted: in such case the flow of gold to and from the country follows exactly the same course as in the case of the full gold standard with gold coinage and circulation, and yields a system giving all the advantages of the gold standard from the point of view of stability and international cohesion. Thus there are two forms of gold standard, the one without gold circulation entailing probably only about half the quantity of metal required for the gold standard with circulation.

Let us then recapitulate. The preservation of price stability entails the freeing of the control of credit. Credit control will be free so long as there is a surplus of gold. The maintenance of a surplus of gold depends upon the ability to keep down the demand for gold, the supply not being susceptible to control. The way to restrict the demand for gold is to prevent the introduction of monetary systems which will require

large amounts of gold. This leads finally to the practical solution from the international standpoint, and indicates the essential characteristic of any international agreement for the regulation of the gold situation.

Such an agreement must relate primarily to the nature of the monetary systems which are to be introduced by the various countries of the world. As the basis of an international agreement it would seem necessary to draw up a schedule showing for each country, first, the character of the system which it proposes to introduce, and, secondly, the amount of gold required by the system proposed. When completed for all countries the schedule would show approximately the demand for gold throughout the world. From statistics showing the existing supply of gold it would then be possible to determine whether there would be a surplus. If this were assured, then the schedule might form the basis of an international agreement for signature, the representatives of each country undertaking to secure the operation of the conditions in the schedule in so far as they affect their own country. If, however, the schedule were to give evidence in the first place that the demand would exceed the supply of gold, and that no surplus would therefore be available, then negotiations would be entered into by the organisers of the proposed agreement with a view to the modification of certain of the national systems proposed, so that less gold would

be required. The schedule would be revised in accordance with any modifications which might result; and when finally it gave assurance that a surplus of gold would remain, it might then be signed as the basis of an international agreement.

It seems probable that certain practical difficulties would arise in securing an absolutely complete schedule or its complete ratification. Possibly some rather less formal method than that suggested above will be adopted in practice. Nevertheless, the principle underlying this proposal stands firm, namely, that an international agreement for the regulation of the gold basis of currency must inevitably be an agreement as to the nature of the monetary systems to be introduced by the various countries.

There is a further problem of importance relating to the regulation of the gold basis. Let it be assumed that an agreement such as that suggested here has been adopted and that a surplus of gold is thereby assured. Such an agreement can, however, be only temporary. Countries would not wish to bind themselves indefinitely to any given kind of monetary system. Consequently it may be impossible to give the agreement more than, say, a three years' lease. It would seem desirable in that case that a permanent international committee should be appointed to which all proposed changes should be communicated, so that the committee might endeavour to secure compensatory adjustments in other parts of the inter-

national system, and so that, at the expiry of the first agreement, a new schedule would be ready, equally ensuring the continuance of a surplus of gold.

Finally, it would be of little value to expend all the effort involved in the foregoing process for ensuring a surplus of gold if, immediately the agreement were signed, the general level of prices were allowed to rise and so destroy the surplus created. The adequacy of the gold supply depends partly upon the volume of credit extended to industry, which in turn depends upon the general level of costs and prices. Thus in proportion as prices rise the gold surplus must dwindle. From this it follows that a further essential feature for the continuance of the excess of gold, and therefore of the scientific management of credit, is that the price level should not be allowed to rise seriously above its initial position at the time of signature of the agreement.

This, however, brings us to the question of price control and the regulation of credit, which constitutes the second part of the problem of international co-operation. In dealing with this second problem, we nevertheless carry forward a fairly clear hypothesis. It will be assumed that an agreement has been signed whereby a surplus of gold has been assured. It will be assumed, further, that the level of prices at the time of signature of the agreement is to be regarded as more or less "normal." The problem is, How may the price level be prevented from diverging far

from that initial position; more particularly, what are the international measures which will facilitate the preservation of that " normal " ?

International Co-operation in the Stabilisation of Prices through the Control of Credit.

The first problem which would arise in the maintenance of a " normal " level of prices would be to secure an internationally acceptable method of measuring the general level of prices, or, otherwise expressed, the purchasing power of gold. Viewed from the practical standpoint, it would seem that, at the beginning, an American index should be used. Since a large proportion of the world's monetary supply of gold is at present in the keeping of the United States, it would seem only reasonable that the task of maintaining the value of the metal should rest with that country, and that the measure of its value should initially be an American index. The index of wholesale prices of the Bureau of Labour Statistics might suitably be used, until it were decided as a result of investigation whether the international measurement of the purchasing power of gold is practicable.

We will postulate, then, that in the early stages of the stabilisation policy the task of maintaining a steady purchasing power of gold will be centralised in the United States, and that the price index chosen as the measure is that of the Bureau of Labour Statistics. The problem would then arise : How may

it be possible for European and other countries to assist the stabilisation policy?

It would be well to consider first the case of rising prices. If the index began to show excessive divergence from the "normal," the first action in the United States would be to restrain the expansion of credit by the sale of securities on the part of the Federal Reserve Banks, and by the raising of the Rediscount Rate. However, if this were to throw the Rediscount Rate above European discount rates, the exchange would be turned in favour of the United States and gold would tend to flow there from Europe. An inflow of gold would weaken the control of the Federal Reserve Banks over market rates, and would counteract the restrictive policy followed. Thus if there were no co-operation between Europe and America, and Europe remained quite passive when American discount rates were raised, the difficulties of that country would be increased. Assuming, however, that there were the intention to co-operate, the raising of the rediscount rate in America would be a signal for European banks that help was needed, and this fact would be given all the weight possible by these banks in determining their own policy. As a result, some sympathetic upward movement of discount rates might be expected in Europe. The more extensive the movement the greater would be the reinforcement of American policy. If, indeed, the raising of European discount rates were to lead to an out-

ward flow of gold from America, the grip of the Federal Reserve Banks over internal monetary conditions would be very materially strengthened.

It should be noted in passing that it is not so much the actual volume of gold in the vaults of Reserve Banks, as the flow of gold to and from the country, which determines the influence of the rediscount rate on the market rate. An inflow of gold affects the money market first by being deposited with the commercial or Member banks. These banks are then for a period relieved of the necessity of rediscounting bills at the Federal Reserve Banks for repleting their own reserves, and are consequently more independent of the rediscount rate. Market rates thus tend to be disconnected from the central rate and to be forced down by an inflow of gold. Conversely, the money market tightens when gold is exported, and the power of the Central Banks is strengthened.

Moreover, the disappearance of gold has a further twofold effect, partly psychological and partly political. In the first place, it is an early warning that money rates will soon be raised above their existing position, and thereby leads to more cautious use of credit on the part of merchants. Secondly, it provides a sound excuse for the Federal Reserve Banks to raise their rates at times when they are troubled with political and other opposition.

It is to be seen therefore that although the United States might be given the principal rôle in maintaining

stability of prices, its task could be considerably eased by enlightened co-operation from European and other countries using gold. In essence such co-operation would entail little more than the general sympathetic movement of discount rates. But refinements would come with time. For instance, the movement of European rates might even on certain occasions precede the American change, with a view to making the latter more possible. The development of an international technique would raise little difficulty provided only that there were the will to co-operate, and that the objective to be gained were clearly known.

It would seem desirable, in conclusion, to link up the foregoing somewhat scattered suggestions with the proposals contained in the earlier part of this essay, by making a concrete recommendation as to the lines on which monetary policy might suitably be directed in the future. The proposal, then, is as follows :

1. The level of prices or the purchasing power of gold on a selected date, say 1 January, 1926, should be recognised as " normal."

2. The index officially selected for the measurement of the level of prices should initially be an American index.

3. The method of regulating credit in the United States should continue unmodified except in one respect. Whilst directing its policy towards trade

stability in accordance with its existing methods, the Federal Reserve System should have regard to the necessity for restraining the price level within reasonable range of the recognised "normal." The limits of fluctuation from the "normal" would be undefined, and would be at the discretion of the Federal Reserve System.

4. The Central Banks of European and other countries should support with their own discount policies the policy of the United States, in so far as their own national situations might permit.

5. An International Conference of Central Banks should be convened for the purpose of establishing and assisting the operation of the foregoing principles. With a view to avoiding possible interference by the gold situation with the credit policy entailed by the above proposal, an international agreement should be adopted ensuring the continuance of a surplus of gold. Such an agreement would relate to the nature of the national monetary systems to be established in the various countries of the world.

6. A permanent international monetary relations commission might be appointed for conducting future international negotiations for ensuring the continued application of the principles established by the first Conference of Central Banks, and facilitating the development of international co-operation.

APPENDIX II

Brief Comparison of the Gold Exchange Standard and the Non-Metallic Exchange Standard [1]

It is evident that no question affecting monetary policy can be discussed without reference to the nature of the monetary system which would most fully satisfy the requirements of the policy proposed. For the purpose of the body of the present essay, it was assumed that the general return to the gold standard or the gold exchange standard was inevitable and that for any practical discussion of monetary policy this condition must be accepted as basic. It might not be valueless, however, to examine the non-metallic exchange standard on its merits, temporarily disregarding the overwhelming practical consideration that the majority opinion favours the return to gold.

With a view to comparing the advantages yielded respectively by the gold exchange standard and the non-metallic exchange standard, certain principles will be regarded as representing the chief aims of

[1] Written before the resumption of the gold standard by Great Britain, but possibly retaining some theoretical and, in the distant future, practical interest.

monetary policy; then the ability of each of the above systems to secure these aims will be examined. The main principle to be secured will be taken to be that of price stability; and the degree of success attained will be estimated from the international point of view. If, under either of the systems, success in securing price stability in the more advanced countries were to be offset by failure in others, this would be regarded as a weakness in that system as a whole.

A further principle, that of exchange stability, will be regarded as important, partly by virtue of its adding a further element of certainty to international commerce, and partly because it imparts a necessary degree of cohesion to the whole system of international price and exchange stabilisation. It has been noted already that when one country stabilises its exchange rate with a second country it thereby automatically binds its price level to that of the second country. Exchange stability may thus be considered of most value as a means to an end; it is a means whereby any country not provided with adequate machinery for the independent stabilisation of its price level may secure price stability by linking itself to another country better equipped; or, conversely, it is a means whereby a minority of countries in which the science of monetary control is most perfected can transmit to the whole international system the advantages of stable money.

A complete international monetary system, capable of yielding both price and exchange stability on an universal scale, can be established either with or without the use of gold. All that is necessary for universalising this dual form of stability is that certain central countries should stabilise their internal price levels and maintain exchange stability amongst themselves, and that the remainder should stabilise their exchange rates with one of the central countries. A complete international block of price and exchange stability would then be formed.

The Genoa System for a Gold Exchange Standard is based on the above principles. It provides, in the first place, for the resumption of the gold standard in fully effective form by a limited number of central countries, which would co-operate in the endeavour to maintain their price levels steady. Exchange stability between such countries would then be automatically effected through the operation of the gold standard. The remaining countries would link themselves up by stabilising their exchange rates, with the aid of "artificial" machinery, with one of the gold-using countries. They would thereby acquire not only exchange stability, but a high measure of price stability. In this way there would be formed an international gold exchange standard yielding universal price and exchange stability.

The principles on which a Non-Metallic Exchange Standard would be organised are almost identical with

those of the gold exchange standard. If, for instance, Great Britain, when on a non-metallic basis, were to adopt price stability as the chief aim of its monetary policy, and if all other countries were then to stabilise their exchange rates with sterling, an international non-metallic exchange standard would be formed. Such a standard would yield a high degree of both price and exchange stability on an international scale.

From the purely theoretical point of view there seems to be little distinction between the two systems as a means of providing the dual form of stability. It is therefore upon the practical issues raised that attention should be concentrated in order to determine on which side the advantage lies.

1. It seems improbable that the non-metallic exchange standard could in actual practice be made fully international in scope from the point of view of exchange stability. Certain countries would prefer to take advantage of the freedom which this standard offers to preserve independence of price policy, rather than bind themselves to another country by stabilising the exchange rate. If, for instance, Great Britain and the United States, under a non-metallic standard, were each unwilling to sacrifice their independence by introducing machinery for stabilising the dollar-sterling exchange, then there would always be a certain degree of exchange instability as between the two countries. Such instability would not only affect

the two countries immediately concerned, but would be transmitted to others. For no country forming part of the group which used sterling as a basis for exchange stabilisation could at the same time maintain exchange stability with any one of the group which stabilised with the dollar (except when, by chance, the sterling-dollar exchange rate itself remained stable); and *vice versa*.

The gold exchange standard eliminates this disadvantage of exchange instability. All the central countries, being on the gold standard, are automatically linked to the same monetary policy, and have their exchange rates with each other automatically stabilised. The other countries, by stabilising the exchange rate with any one of the central countries, would secure exchange stability, not only with this particular country, but with all others forming part of the system.

Hence, exchange stability is realisable on a completely international scale under the gold exchange standard more certainly than under the non-metallic exchange standard.

This advantage may to a certain extent be offset by the fact that under the gold exchange standard the influence of American monetary policy will materially affect, if not entirely dominate, the policy of all other parts of the system. The evidence is not yet conclusive that the ability to stabilise prices is greater in America than in other financial centres. Conse-

quently the adoption of the gold exchange standard in preference to the non-metallic standard, by creating greater dependence on American policy, might entail the sacrifice of a measure of price stability on the part of countries better equipped for maintaining a stable level of prices.

The strength of this argument depends entirely on one's view as to the willingness and ability of the United States to maintain a stable level of prices. On this point there is no final assurance and a judgment is therefore difficult.

2. In the case of those countries which are in a more primitive state of development the gold exchange standard would seem to offer certain potential advantages over the non-metallic exchange standard. In the first place, under a non-metallic standard there would be a greater tendency for countries to attempt independence of monetary policy. In the case of the better organised countries, this might be an advantage. But for others it might prove disastrous. In any event it would destroy the general state of cohesion of the international system as a whole.

Furthermore, there may be countries in which the stabilisation of the exchange rate by "artificial" measures (*i.e.*, without the use of gold) cannot be effected. Although there exists, for every possible variety and stage of monetary development, a corresponding method of stabilising the exchange rate, yet there may be countries in which those in control are

not fully conversant with the local organisation and are therefore not competent to apply the requisite machinery. This lack of understanding of the national situation has, in fact, caused the failure of certain experiments in exchange stabilisation during recent years.

Weaknesses due to inadequate organisation or to the inability of those in control to comprehend the difficulties peculiar to the national situation might in certain instances be remedied under the gold exchange standard by the adoption of the gold standard itself in the countries concerned. There are few parts of the world in which the method of operating the gold standard is unknown, and consequently, wherever the political situation permits, the gold basis might be re-introduced in any countries which are incapable of applying an artificial system of exchange stabilisation.

In brief, then, it may be said that, whereas from the purely theoretical point of view little distinction can be drawn between the two systems, the effect of introducing the gold exchange standard would probably be to add a considerably greater measure of cohesion and unity to the system as a whole than would be immediately practicable under the non-metallic system. It would more easily collect up the weaker units and bind them to the general block of international stability. The advantages of such international unity depend very materially, however, upon

the success which the United States, assisted by the Central Banks of other countries, can achieve in applying a policy of price stabilisation.

3. Any final decision as to which monetary system may prove most suitable is rendered difficult, not only because the various considerations raised are almost imponderable in themselves, being dependent on highly speculative circumstances, but also because it is exceedingly difficult to bring them into true perspective. For instance, the more immediate or opportunist considerations, such as the adjustments necessary on introducing the system, frequently loom large, out of all proportion to their ultimate importance. For when it is considered that the action which may be taken during the next eighteen months will have a profound influence on the whole future course of monetary policy, it would seem essential to take the longest possible view of any proposals for reform. The immediate effects of the introduction of the new policy must be regarded as of relatively minor importance. For this reason the more passing considerations, which it is proposed to touch upon next, are not intended to carry much emphasis.

From the purely opportunist point of view, a certain advantage would seem to lie on the side of the non-metallic system. Each country, in affiliating itself to the system, could select whatever moment it wished for doing so. It would be free to choose the price level which would prove most convenient to its

industry, and could postpone joining the system until that price level had been reached.

This freedom of choice is not absolutely denied in the case of the resumption of the gold standard. Nevertheless, for those countries which are relatively close to pre-war parity, the possibility of their resuming the gold standard by a contrived movement of the price level will always be present in the minds of those in control, and may materially disturb the confidence of business in the countries concerned.

The introduction of a non-metallic standard, whilst being smoothly effected from the point of view of trade, would not, however, be entirely frictionless in other respects. The complete demonetisation of gold would entail important readjustments in several spheres. For instance, if countries using gold were to abandon the gold basis, and begin to sell the metal in the market, the price of gold would fall universally. All holders of gold and all creditors for gold would lose in proportion. The debtors would, of course, gain. For instance, unless there were a readjustment in the nominal amount of reparations payments, Germany's burden might fall to about half its present real value. This might be regarded as an excellent result from many points of view. But it would certainly raise difficulties, and probably some friction.

Any Central Banks which still held large supplies of gold would find themselves in possession of an asset of much reduced value. They need not necessarily

lose thereby, since they might sell their gold and replace it with legal tender notes. But with the sale of gold the price of the metal would fall still further, and complicate readjustments in other spheres.

Gold production would cease almost entirely for a number of years. Unemployment at the mines, and business loss, would ensue and would require compensation.

These considerations, regarded as current and immediate questions, are important; and they will materially influence the final decision as to the monetary standard to be adopted. But when a long view of the situation is taken their importance rapidly diminishes. For it is evidently preferable that certain readjustments, lasting perhaps three or four years, should be effected, than that the world should continue decade after decade paying an enormous toll for the extraction of gold from the earth. There can be no comparison between the immediate expense of compensating gold-mining and other interests on the one hand, and the continuous cost of producing the precious metal during an unlimited future, on the other.

The argument goes a little further than this, however. Although the expense over long periods is a more important consideration than any current adjustments which may be necessary, the whole question of material expense is itself of less importance than that of the *results* to be gained from the use of

gold. If it could be proved that this metal were capable of conferring upon the world a monetary system superior to any other, then the question of the cost of gold production is of relatively little consequence. If, on the other hand, the world's trade could be effected more smoothly by the aid of a non-metallic system, then the continued mining of gold is not only a waste but is detrimental to the interests of the community. The essential test in all circumstances is not the expense entailed, but the results which gold will yield in comparison with what could be achieved without it.

It seems rational, therefore, in the first place, to put aside current considerations in favour of long-period effects, and, secondly, to put aside questions of expense as being quite subordinate to the results which may be achieved. One is thus left with the task of determining what may be the ultimate results given by the two systems. However, even though attention be concentrated on this one phase alone, no clear conclusion seems possible, since the future under either system would be somewhat uncertain, being dependent very largely upon the attitude of quite a small group of human beings. All that seems possible is to express briefly the opposing points of view of the metallist and the non-metallist, and indicate the line on which a sane compromise might be effected.

The principal inspiration actuating the propaganda

of the non-metallist is the belief that price stability, the chief aim of monetary policy, can only be satisfactorily achieved when the monetary system in which it is operated is quite plastic. The introduction of gold into the system would add an element of rigidity. There would be ever present the necessity of moulding the gold situation to the requirements of the price policy. This might be difficult. It might entail international collaboration of a most advanced character, a kind of collaboration of which there is at present little outward evidence. Even in the most ideal circumstances, the gold situation would attract some attention, and, in so doing, would draw interest away from the main task, that of developing scientific indexes for assisting the policy of price stabilisation.

On the other hand, given a non-metallic basis, those in control of monetary policy would be absolutely free to determine their policy on a purely scientific footing. Not only would they be unfettered, but they would be drawn by the force of circumstances to devise new criteria and evolve a carefully designed system of conscious control. The principle of price stability would inevitably emerge as the most important criterion for their guidance. Once accepted, this principle would continue unchallenged by gold or any other material factor, throughout time.

Those who favour gold resumption regard the problem in a somewhat different light, though the distinction between this group and the non-metallist

group is probably one of temperament rather than an actual point of view. Their purpose also, when they recommend the resumption of the gold standard, is that of securing price stability; only they would be content to risk sacrificing the maximum of stability in the certainty of securing at least a measure of stability. The gold standard, even though not "managed," would place certain definite limits on possible fluctuation of the price level, and such limits might even prove to be narrower than those yielded by the non-metallic system if the latter were only loosely controlled. The element of caution is strong with this group. The gold standard has been tried. At least the manner of its operation is fully known. Mistakes in its application may have occurred in the past; but the lessons taught have been well learned.

Gold automatically gives a measure of security. But, in so doing, it does not preclude the possibility of scientific and progressive development. There is reason to believe that the gold standard, converted into a "managed" gold exchange standard, could be applied with considerably greater success than heretofore. With certain modifications in the principles of application and a determined effort of international collaboration, embracing the co-operation of the United States, a higher degree of international price and exchange stability than has yet been known could be achieved.

From the immediate practical point of view the only

rational attitude appears to be to accept the fairly general assumption of the gold standard as inevitable, and from that basis build constructive suggestions for the evolution of the system. Such a movement for gold resumption may be turned to advantage provided the Genoa proposals are brought immediately into operation. If the international co-operation recommended by the Genoa Conference takes concrete form, and if the principle of price stability is adopted and clearly defined, the prospects for the future are most promising. Indeed, were the Central Banks to give a clear guarantee of their intention to place stability of the value of gold foremost as a criterion for credit control, it would seem an act of grave irresponsibility to attempt in any way to impede their progress in securing this universally desired purpose in the manner which appears to them most practicable.

The adoption of the gold exchange standard, in accordance with the recommendations of Genoa, would constitute an epoch-making development in the evolution of monetary organisation. It would represent an open declaration that the days of unmanaged currencies are over, that the attitude of naïve faith in the condition of the gold supply belongs to an obsolete age and is to be supplanted permanently by a considered effort of international co-operation to govern such circumstances as are susceptible to control.

In character this step might even be regarded as

an advance towards non-metallism, in spite of its entailing the resumption of the gold standard in various countries. For although the gold exchange standard partially preserves the form of the gold standard proper, it shows, in actual principle, much closer resemblance to the non-metallic exchange standard than to the gold standard in operation before the war. The gold exchange standard is, in fact, a combination of the gold standard proper and the non-metallic standard. Under this combined system, countries with paper currencies graft themselves on to the golden branches of the system by means of exchange stabilisation. The system remains based essentially on gold and preserves the same safeguards and general cohesion as the traditional pre-war gold standard. But, whilst gold is still used for uniting countries in a combined monetary policy, this metal no longer dictates what the combined policy shall be. The gold reserve ratio is supplanted by the criteria employed for a " managed " currency.

It seems just possible that, with the pendulum swing of monetary fashion, the number of countries which are drawn to the discovery that gold is an unnecessary element in their monetary systems will increase, and that the regime of paper currencies artificially stabilised with the dollar or sterling will be extended. Such extension would signify a general veering towards the non-metallic standard.

If the development were to become really popular,

it would almost compel the remaining gold-using countries to abandon the gold standard, there being presumably some limit to the amount of discarded gold which countries even as rich as the United States would be prepared to absorb. The further evolution of the gold exchange standard towards non-metallism, and the possible reactions which this may have in different spheres, is therefore a subject worthy of the attention of economists.

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